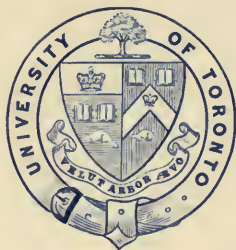




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THE  
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1897

*Paul Dawkins*

VOLUME III



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1.

Gallery of Henry II, Fontainebleau.

# THE BROCHURE SERIES

## OF ARCHITECTURAL ILLUSTRATION.

VOL. III.

JANUARY, 1897.

No. 1.

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### THE INTERIORS OF FONTAINEBLEAU AND VERSAILLES.

THE palaces of Fontainebleau and Versailles are, with the exception of the Louvre, the most important of the many royal palaces of France.

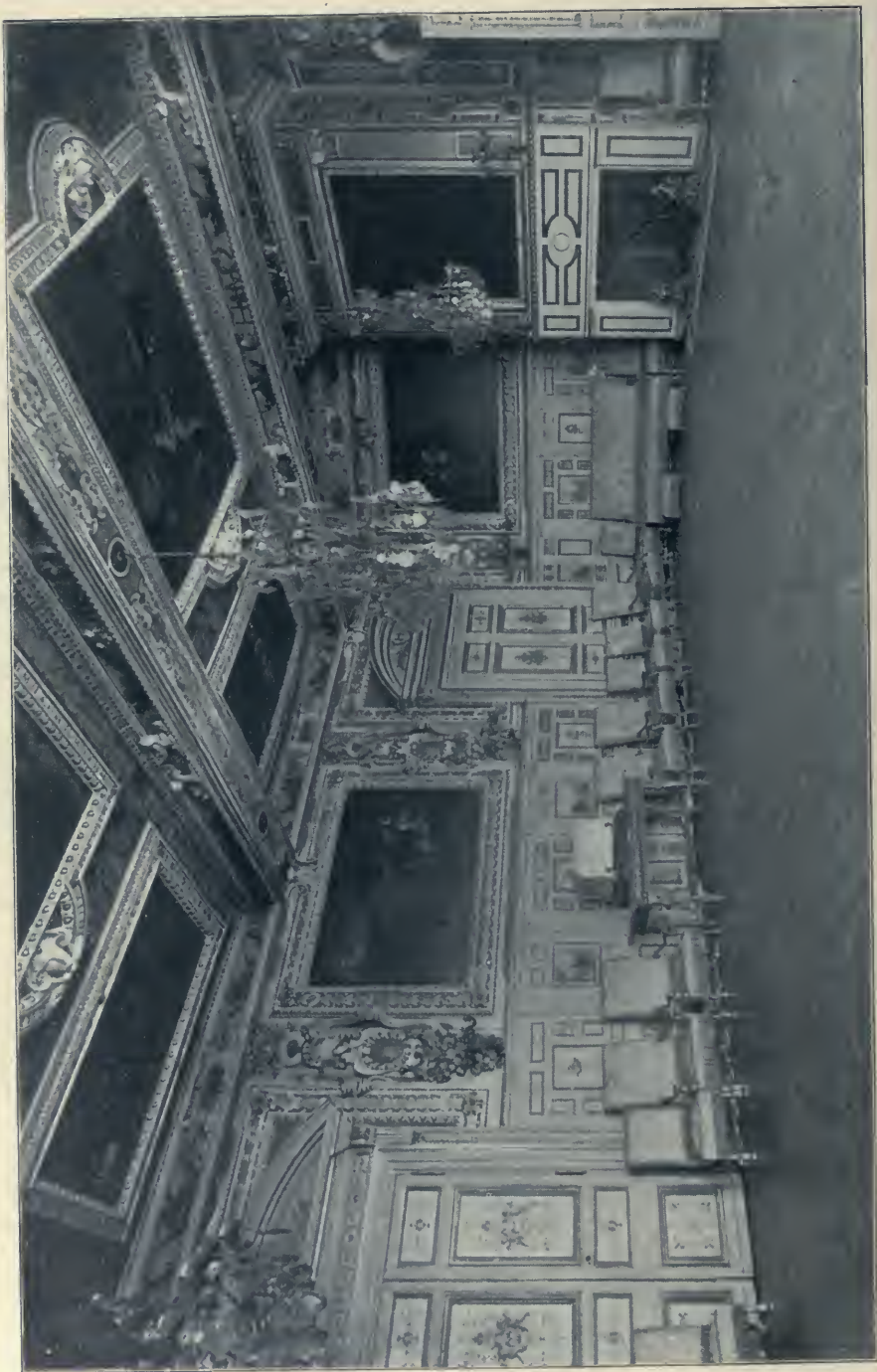
They are both built up of parts varying in age and style, extending from the fourteenth to the present century, but in each the parts of greatest architectural interest are the work of Francis I and his successors. Francis I was an enthusiastic builder and patron of the arts, and through his political associations with Italy, and his admiration for the productions of the Renaissance artists of Italy, then at the height of their achievement, was led to invite many of the most noted Italian painters, sculptors and architects to his court, and to employ Italian craftsmen for his building undertakings. Some of his successors, Henry II. in particular, followed his example, and many of the finest portions of these two palaces are the work of Italians, or done directly under Italian influence. Leonardo da Vinci, Andrea del Sarto, Benvenuto Cellini, Primaticcio and many other prominent artists, came to France at his invitation. He also endeavored to secure the services of Michael Angelo, but without success.

Fontainebleau, as it can be seen from a small hill outside the village, presents a strange diversity of struc-

ture, form, and color, here white with marble walls, extending out in Italian terraces, and there ruddy as the sunset, and surrounded by the characteristic roofs of the latter part of the sixteenth century. There is no idea of unity, a collection of chateaux, a jumble of disconnected styles, but broken up by beautiful stretches and spots of water, and all harmonized by a magnificent setting of green forest. The forest, a royal hunting ground, really made the palace, and now does more than all else to enhance its beauty.

A Gothic donjon stood here in the middle ages, probably built by Louis VI. or Louis VII., and was used as a hunting seat. Around this in later years was gradually erected the present collection of buildings. It has been the theatre of many stirring scenes and memorable events.

On the twenty-eighth of April, 1528, Francis I. after his conquests in Italy, decided to realize some of his dreams, and signed the decree for the execution of the chateau of Fontainebleau. Gilles le Breton, mason and stone cutter, Etienne Bourdin, wood carver, and Maillard, carpenter, undertook to build for the king a chateau on this spot. In the following year a portion of the work was begun. In the progress of the building, Serlio, Rosso di Rossi, Primaticcio, Niccolo



II.  
Salon of Louis XIII, Fontainebleau.

dell 'Abbate, and many other famous artists were employed, and have left behind them a monument so important that they have been classed as a "school," known as the Fontainebleau School. The efforts of these men were not confined to Fontainebleau, but were directed towards the rebuilding of the Louvre and many other important works in which the king indulged his passion for the arts. The Fontainebleau School was the truly vital movement of the Renaissance, which was just passing the height of its development in Italy.

The palace of Versailles, with its dependencies, presents much the same jumble of styles and diversity of features as Fontainebleau, besides being much greater in extent. Our two illustrations are both from rooms in the Petit Trianon, which does not form a part of the palace proper, but was originally an independent residence.

## I.

## GALLERY OF HENRY II, FONTAINEBLEAU.

The ball-room or gallery of Henry II. is by many considered the masterpiece among the interiors of the French Renaissance. It is 97 feet 4 inches long and 31 feet broad. It has a beautiful outlook on one side upon the gardens, and on the other upon one of the courts, through large arched windows five on each side, having no architraves, occupying the whole space of the alcoves which are 8 feet in depth, separated by piers 7 feet in width. These alcoves are surrounded with seats 13 inches in width and 20 inches high. The wainscot, 8 feet 6 inches high, is of quartered oak with no finish whatever, probably planed and scraped, but not so smooth as would be made by sandpapering. The mouldings and flutes of pilasters are gilded with dull gold. The abundance of light gives an added value to the magnificent decorations of the walls and ceiling. The caissoned wooden ceiling in octagonal panels with rich carved mouldings is of quartered oak of the same color as the wainscot, enriched with gold and silver, the field of the octagonal panels in gold. The polished oak floor laid in an octagonal pattern, seems to

reflect the sumptuous design of the ceiling, and from its finish and lack of gold, is a little darker in tone. The walls as far as the frieze, are covered with paintings, low in tone, and of a general gray effect, containing the emblems of Henry II. and Diana of Poitiers, surrounded with frames of gilded mouldings. Serlio, the architect of this room, designed to cover it with a vaulted ceiling, and the corbels for the springing of the vault may be seen on the piers, now serving to support branching chandeliers. The frieze is a mass of mythologic and ideal figure compositions. The vaults and walls of the bays or alcoves are similarly painted, although with broader and simpler designs. At one end of the room is the musicians' gallery, and at the other the superb mantel shown in our illustration.

The freshness and wonderful preservation of this room are at first sight astonishing. Decorated by Primaticcio and Niccolo dell 'Abbate, between 1552 and 1557, how does it come to be in its present perfect condition? It has been retouched and repaired at various times since then, and has suffered from the would-be improvements of decorators, but was all thoroughly restored in 1834 by Alaux, whose skill and painstaking research have given us a very close approach to the original room.

## II.

## SALON OF LOUIS XIII, FONTAINEBLEAU.

The Salon of Louis XIII. was built by Francis I. and decorated by Henry IV. Its original form was elliptical, but it was changed by Louis XV. to its present shape, and the doors enlarged. The rich ornamentation of the ceiling and frieze is the work of Gabrielle d' Estrées. The painted panels of the walls and ceiling, mainly the work of Ambroise Dubois, were done by Louis XIII.

## III.

## BOUDOIR OF MARIE ANTOINETTE, FONTAINEBLEAU.

This room, 19 feet by 17 feet 6 inches, and about 11 feet high (8 feet 4 inches to top of door cornice) is light and at the same time harmonious in effect. The wall panels are prepared



III.  
Boudoir of Marie Antoinette, Fontainebleau.

with plaster and then covered with leaf silver which has turned yellow in streaks, and has the effect of a warm, silvery, cream-colored satin. These panels are painted with arabesques in green, gray, rose-color and gold. An Aurora by Barthelemy in silvery gray decorates the ceiling. The mouldings, including stiles, architraves and cornice, are gilded, with the fillets and parts of the ornaments burnished. The panels and architraves of the door are of silver with designs painted in yellow, buff and gold, with grayish green leaves and pink flowers. The stiles and rails of the door are painted about the color of unstained mahogany, and are mottled. This is the only place in the room in which this treatment occurs. The floor is of red mahogany. The mantel is of fine white marble with burnished gold ornament. The plaster relief panel above the door is creamy white. The frieze has a spiral ornament with little balls picked out in silver, and above there is a cove with a silver ground covered with an arabesque painted with the same colors as the wall panels. The furniture is of solid gilt with burnished ornament and is covered with yellow satin with rose-colored designs. Louis XVI. himself, who had his workshop here, as at Versailles, is said to have wrought the metal work of the windows of this room.

## IV.

## CABINET DE L' ABDICATION, FONTAINEBLEAU.

It was in this room, one of the suite of apartments of that monarch, that Napoleon I. signed his abdication. The whole suite was furnished and decorated in the style of the first empire. The hangings and the covering of the walls and furniture of this room are crimson silk with silver and white designs, probably faded from gold and white. The furniture is gilt with burnished ornament. The woodwork is grayish white with gilded plaster ornament, the fillets and other portions of which are burnished. The chandelier is of gilt and glass.

## V.

CABINET DE TRAVAIL OF NAPOLEON I.  
FONTAINEBLEAU.

This room is finished with grayish white painted woodwork, prepared in plaster, and ornamented with stucco, relieved with gilding, partly burnished. The panelled wainscoting has gold ornaments shaded with buff and brown paint. The walls are hung with brocaded satin in green with figures in gold and a deep rose-colored border. Vertical burnished gold rods, arranged in parallel lines, secure the hangings to the walls at the semicircular end of the room. The furniture is covered with green brocaded satin of the same material as the wall hangings. The rose-colored border is used on the furniture as well as the walls.

## VI.

## BED OF. MME. DE MAINTENON, FONTAINEBLEAU.

This little room, 12 by 14 feet, is light and cheerful in effect, and simple in design. The walls are finished in grayish white with mouldings and ornaments in dull gold. The furniture is all of gold with fillets and ornament burnished, and is covered with grayish white silk, lighter and warmer in tone than the walls, with patterns of colored flowers. The foot of the bed is covered with white silk, and the hangings are all of white silk, with a border of yellow, light green and rose.

## VII.

## DINING ROOM IN THE PETIT TRIANON, VERSAILLES.

## VIII.

## ROOM IN THE PETIT TRIANON, VERSAILLES.

The Petit-Trianon was built by Gabriel for Louis XV. in the botanical garden which Louis XIV. had formed at the instigation of the Duc d' Ayen. It was intended as a miniature of the Grand Trianon, as that palace had been a miniature of Versailles.

The palace was often used by Louis XV., who was here first attacked by the small-pox, of which he died. Louis XVI. gave it to Marie Antoinette, who laid out its gardens, and whose happiest days were spent here. It is a very simple, unassuming country house, and its main interest is doubtless from its associations. Our two illustrations show the characteristic simplicity of the house throughout.



IV.  
Cabinet De L' Abdication, Fontainebleau.

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The independent efforts of groups of workers in the different departments of art and public progress have gone on increasing in this country from year to year, and the results are evident in all directions. Painters, sculptors, architects, and designers, have all organized for their own special purposes, and have enlisted the support of interested amateurs outside their own ranks. This organization has now reached the point in some places where it seems desirable to bring together the workers in different fields in concerted action for the accomplishment of objects touching the welfare of all, and in which one set of workers does not have all of the necessary points of contact with the public.

The formation of the Architectural League of New York was a step in this direction—for the League is not restricted in its membership to architects only, and has undertaken work of a public character outside its professional limits, which has been an important help in securing a more extended public appreciation of art. The efficiency of the League has been largely increased by its comprehensive membership.

A further step is now being taken by the formation of the Fine Arts Federation which will bring into more intimate contact the various artistic associations in New York. By this means architects, sculptors, mural decorators, landscape engineers, and others whose best efforts are put forth in public, or semi-public work, will labor in common, and with much greater efficiency.

In Boston and in Philadelphia this need is rapidly becoming recognized, and the various societies of art-workers are gradually coming into closer relation, which can not fail to show good results.

A reorganization of the Washington (D.C.) Architectural Club was effected on Dec. 8th, when a new and more comprehensive constitution was adopted, and officers were elected for the coming year as follows: President, George O. Totten; Secretary, Walter G. Peter; Treasurer, Francis B. Wheaton; Directors, W. J. Marsh, E. W. Donn, W. D. Windom and A. L. Harris. Through the kindness of the Washington chapter of the American Institute of Architects, their rooms have been placed at the disposal of the club, provided the club be reorganized on a substantial basis. More than thirty members were present at this meeting, and sufficient interest was evinced to warrant the feeling that the club could be conducted successfully. The first move in the direction of practical work was the appointment of a committee from the club to meet the committee in charge of the erection of reviewing stands for the inaugural ceremonies on March 4th. In previous years these stands have been roughly constructed along the public reservations, often completely hiding some of the best statues and monuments in the city, and obstructing the view of such buildings as the Treasury. The club will ask to be allowed to submit sketches and a scheme for so arranging the stands as not to interfere with the view of the best features of the city along the line of the procession.

## Qualifications for Practicing Architecture in England.

The profession of architecture in England has been much more fully organized than in this country, and the Royal Institute of British Architects, the National Association, has done all in its power to insist upon a high standard of training and attainment



V.  
Cabinet De Travail of Napoleon I, Fontainebleau.

on the part of its members. Fellows may be elected either from the class of Associates, or from outside, if they show proper qualifications; but Associates are only elected after passing a number of examinations showing their proficiency in general subjects with which trained architects should be familiar. These examinations are divided into three grades, and are held twice each year. The preliminary examinations are intended to test the candidates proficiency in the rudiments of a professional education, which include the subjects of a common school education, and such technical subjects as elementary mechanics and physics, geometrical drawing, perspective and freehand drawing from the round.

The intermediate examination requires a further proficiency in geometrical and perspective drawing of architectural subjects, and a knowledge of architectural history, and a further study of technical subjects included in the constructional and artistic branches of architecture.

The final examination if satisfactorily passed, is supposed to indicate that the candidate is equipped to enter the profession as a practicing architect, if he so desires.

The examining committee of the Royal Institute in its annual kalendar gives advice to applicants which indicates in a general way the requirements of the several examinations. The Architectural Association working in conjunction with the Institute conduct evening classes which furnish instruction to students preparing for the several examinations, and some of the suggestions of the examining committee relate especially to these classes.

The following extracts are taken from the kalendar, and show in general the preliminary requirements in the way of training considered necessary before entering the independent practice of architecture in England.

The subjects included in the preliminary examination are those in which proficiency should be obtained by the applicant before entering an architect's office, and it is desirable

that special attention be given to them before he leaves school.

Clear and well-formed handwriting, correct spelling, grammar and punctuation are indispensable.

Powers of observation and of graphic description, facility of composition and lucidity in the expression of ideas, should be carefully cultivated, as being of the utmost value in the prosecution of further studies, and in the work of later years.

Arithmetic, algebra and plane geometry should be familiar to the applicant, and a knowledge of their application in the solution of simple problems in elementary mechanics and physics should be acquired.

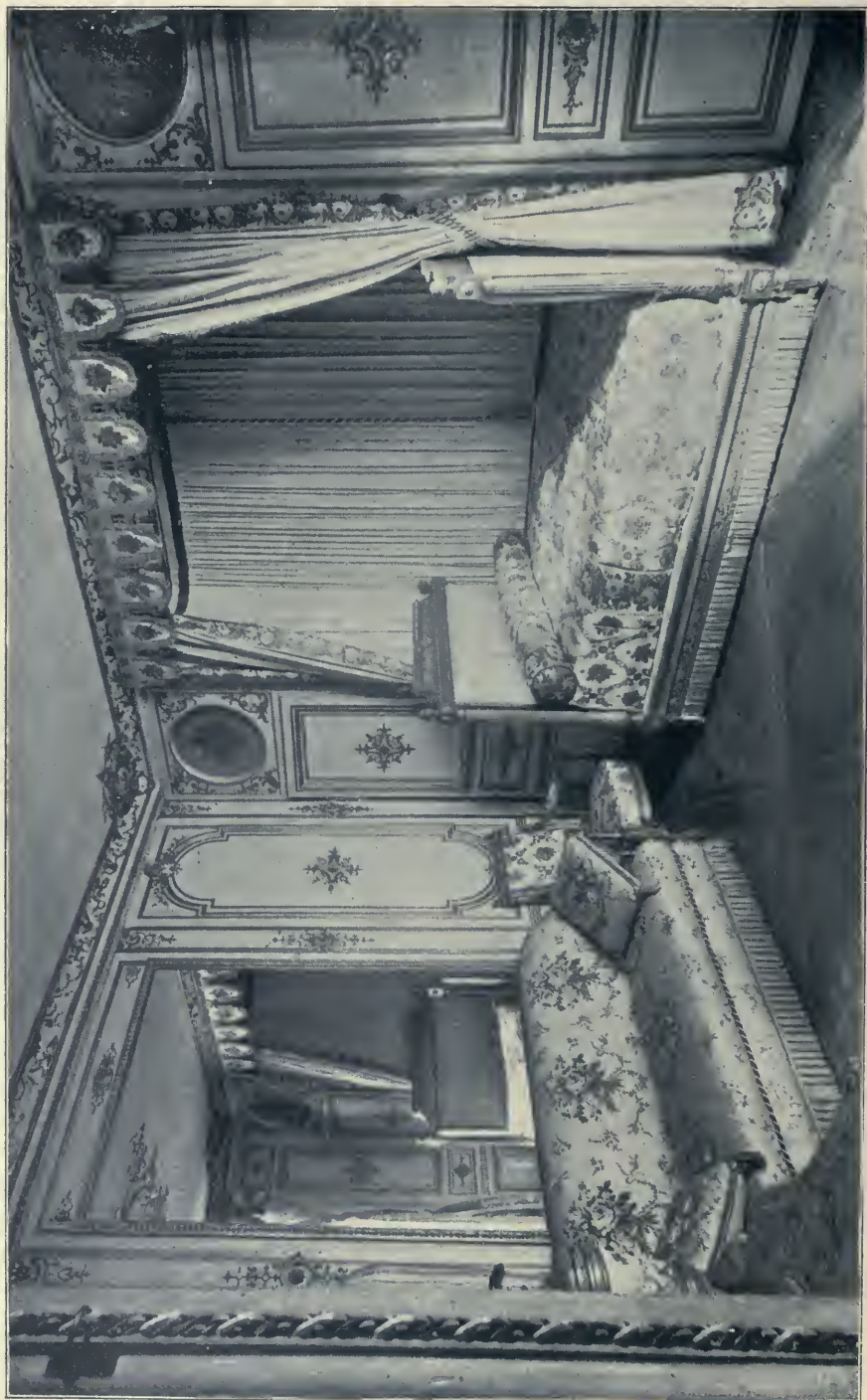
The geography of Europe and the history of England from the Norman Conquest to the end of the Tudor dynasty should be well studied, regard being had to the connection between the history of the country and its architecture.

A good knowledge of French is essential, and of German or Italian very desirable, and a clear understanding of the Continental metrical system will also be useful.

Geometrical drawing and the elements of perspective are indispensable subjects of study, and should receive particular attention; while free hand drawing with rapidity and precision from the cast and the antique, and sketching with accuracy should be carefully cultivated. Reasonable proficiency in these subjects is of the first importance.

The first aim of the probationer who has passed the preliminary examination, should be to acquire facility and accuracy in the geometrical and perspective drawing of architectural subjects, commencing with the orders and the several periods of Mediaeval architecture, drawn out to a large scale and from figured dimensions.

This course should be followed by careful study of the ornament appropriate to each style, the enrichments of the mouldings being drawn full size, and sketched and measured, as far as possible, from actual work. A general knowledge of mouldings and details having been thus acquired, their



VI.

Bed of Mme. de Maintenon, Fontainebleau.

practical application should be matured by making full figured drawings of them, with details full size.

The course of study necessitates the continuous use of a note-book (large quarto), in which the important parts of the books under study should be written down in the probationer's own words, and freely illustrated by careful sketches from all available sources (notes on one page, sketches on the opposite page); and the subjects, being systematically arranged, might be further illustrated by notes and sketches from other books and authorities. A sketch note-book—to be freely and continually used—should be the inseparable companion of the probationer.

The study of the subjects comprised in the Science Section should be followed out in a similar manner, knowledge of details of construction being acquired, as far as possible, by actual measurement of work. Applied physics, mensuration, land surveying and levelling demand attention, with a view to the complete mastery of their elements and application; formulas for calculating the strength of beams, columns, etc., should be worked out and the results compared with actual experience. The careful study of plane geometry as applied to actual work, and the acquisition of a thorough knowledge of the projection of solids and development of surfaces are essential.

The admission of the probationer to the intermediate examination will depend on the satisfactory execution of the testimonies of study, which are not to be considered merely as samples of drawing, although good drawing is required, but should be evidence of the study of the subject represented. In all cases where it is possible to obtain the information, the jointing of both wood and stonework must be shown. Any additional information as to materials used and methods of construction should be given, and attention be called by notes or sketches (or both) to any peculiarities, and the reason for them explained. Different kinds of material may be indicated by color. Wherever possible,

the subjects illustrated must be from old examples, and should be measured from the actual building; when the example is copied from any published drawings, the authorities from which the information is obtained should be stated, and it is desirable to add the date of erection of the work. All drawings of ornament should have a section showing the projection, and, if not full size, should be figured or have a scale. Where possible, information is to be given as to its source, position in the building, the material in which it is executed, and notes as to how these have influenced its design or execution. To show that the design has been studied, a small scale sketch (perspective or elevation), with plan and, if necessary, sections, which may be in skeleton only, may be added, so that the relation of the part shown to the whole design may be seen. The written memoir must be prepared with care and neatness, and the illustrative sketches well and accurately drawn.

The principles of study recommended for the intermediate apply equally to the final examination.

Reading to be of permanent value should be supplemented by the taking of copious notes, fully illustrated by careful sketches, and by the collection or information under various heads from different authorities. Combined with the study of the best accessible examples of old work, the habit of accurately sketching architecture in plan, elevation, detail, ornament and construction, especially from memory, should be assiduously cultivated, bringing eye, brain and hand into common, harmonious action.

When a knowledge of detail has been thoroughly acquired, the student should take up the study of the general principles of design in both plan and elevation, and of the combination of parts to produce an effective and well-proportioned composition.

The student should also master the principles and practice of the preparation of contract and working drawings and specifications, and of the control of actual work; he will thus qualify himself to deal with the ordinary and many of the difficult problems



VII.

Dining Room in the Petit Trianon, Versailles.

which arise in the designing and carrying out of modern buildings. He should miss no opportunity of visiting buildings in course of erection.

As in the intermediate, the admission of the student to the final examination will depend on the sufficiency and excellence of his testimonies of study; poor composition, careless or imperfect execution, lead to disqualification.

The student having passed the "final," has therefore shown himself possessed of a solid ground-work of knowledge, on which he may proceed with those more advanced studies in design and construction, proficiency in which will qualify him to engage in successful practice as an architect.

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## Notes.

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Few observing tourists upon returning from abroad, fail to remark upon the beauty of color, texture and finish of the floors in European cities. Many of these remain in as perfect condition to-day as when laid centuries ago, and in fact show less signs of wear than American floors which have had only a few years usage.

Inquiry makes this difference plain. The whole secret lies in the finish. A thorough application of wax in the beginning, and a light application from time to time thereafter, and sufficient care in preserving the polished surface by occasional rubbing, perhaps once in two weeks, is all that is required. With this treatment instead of deteriorating with age, old floors seem to gain in beauty and richness as years go on.

American enterprise has found in shellac and varnish a cheaper finish and one easier to apply; and alas, what is the result? With the exception of one or two specially prepared floor varnishes, but one result can follow. After only a short usage, the finish crumbles under the heels of boots, or where furniture is moved across it, and white scars are left which can only be removed by a new application of the finish. The reason for this is that the gums of varnish

and shellac are applied in a plastic state, but when the spirits used in making the preparation have evaporated, which will occur in a short time, the gum becomes hard and brittle, and crumbles when subjected to rough usage. Oil is frequently used for a floor finish, but this is for many purposes the worst possible finish, as it catches dust, and darkens the wood, thus destroying its natural beauty.

Among the thousands of owners of handsome floors in this country, probably a large proportion are asking themselves, "What can be done with my floor?" The answer is—"Profit by the experience of our European neighbors and use wax always." By looking nearer home the same answer may be had. The hundreds and thousands of Americans who have used Johnson's Prepared Wax, find their floors becoming more and more beautiful every day, and with little care. It is easily handled by following the directions upon each package, and can be kept in perfect condition by going over with a weighted brush at short intervals. This wax is made by S. C. Johnson, Racine, Wis., who has had many years experience as a manufacturer of parquet flooring, and knows something about their proper finish. We venture to say, from the many favorable reports concerning his floors, that his wax will need no recommendation to those who own them.

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The Flexible Door & Shutter Co., of New York, has closed a contract with Mr. H. E. Streeter, who becomes the sole selling agent of their goods, for the New England States. Mr. Streeter needs no introduction to the architects of New England, for there are few men in the building materials line known more generally or favorably. He has a fine line of goods to handle, and will devote particular attention to the wardrobes for schools, office buildings and residences, which are made in a variety of sizes and styles, and offer the great advantage of economy of space, which is the accompaniment of the "flexifold" pattern of door. Mr. Streeter's office is at 13 Exchange Street, Boston.



VIII.  
Room in the Petit Trianon, Versailles.





IX.

Façade of Orvieto Cathedral.

# THE BROCHURE SERIES

## OF ARCHITECTURAL ILLUSTRATION.

VOL. III.

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No. 2.

### THE CATHEDRAL OF ORVIETO.

THE Cathedral of Orvieto is one of the most celebrated and interesting, as well as one of the most magnificent examples of the Italian Gothic of the thirteenth and fourteenth centuries. It replaces the church of Madonna di S. Brizio, which was founded in consequence of the miracle of Bolsena.

The value of this miracle, which has been made familiar to students of art through Raphael's celebrated fresco in the Stanze of the Vatican, consisted in its establishing unmistakably the truth of Transubstantiation; a dogma which the church was at this period all the more anxious to establish, since, in Northern Italy a new evangelist, Abbot Joachim, had arisen to preach the coming of a Kingdom of the Spirit which should transcend even the Kingdom of the Son, as that had transcended the Jewish supremacy of the Father.

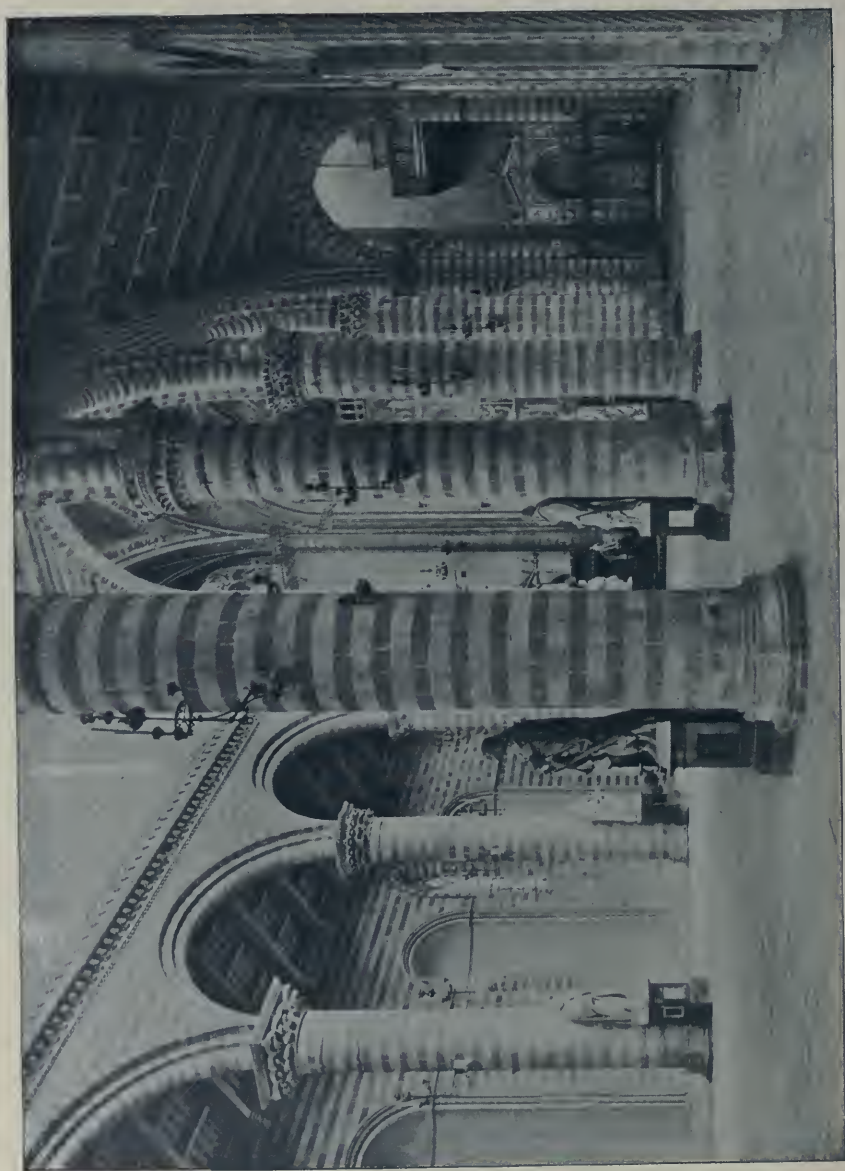
"At Orvieto," says Ruskin, "enthroned against the gates of Hell, in unassailable fortitude, and unfaltering faith, sat Pope Urban; the righteousness of his cause presently to be avouched by miracle, notablest among those of the Roman Church. Twelve miles east of his rock, beyond the range of low Apennine, shone the quiet lake, the Loch Leven of Italy, from whose island the daughter of Theodoric needed not to escape—fate seeking her there; and in a little chapel on its shore a Bohemian priest, infected by the Northern infidelity, was brought back to his allegiance by seeing the blood drop from

the wafer in his hand. And the Catholic Church recorded this heavenly testimony to her chief mystery in the Festa of the Corpus Domini, and the Fabric of Orvieto."

The corner-stone of the present building was laid by Pope Nicholas IV. on Nov. 13, 1290, and the church begun under the supervision and according to the plans of Lorenzo Maitani of Siena. The work progressed so rapidly that in 1298(?) Bishop Guido di Farnese was able to read the first mass in the church. The façade, however, was not begun until 1310, and the decoration of it was continued through most of the fourteenth century.

The use of alternate horizontal courses of black and white masonry, like that of the cathedrals of Florence and Siena, with which latter it is commonly ranked, and with which it is nearly contemporary, the beautiful campanile and the elaborately decorated gabled façade, like that of the Siena Cathedral, furnish the salient points by which this charming building is commonly remembered.

This cathedral, like those in other towns, once constituted a great arena for the display of artistic skill. The guardians of the building were unwearied in providing for its ornamentation; and like the curators of modern museums, who are zealous in their endeavors to secure works by the best artists, they did all in their power to obtain the services of the first masters of the day for the embellishment of their church.



X.  
Nave and Aisles of Orvieto Cathedral.

The church is cruciform, with a length of about 290 feet and a breadth of about 100 feet, the transept not projecting. Its nave, 131 feet high, is broad, and is separated from the aisles by five round piers on each side, with low, foliated capitals supporting simple round arches. In front of each of the nave piers stands a colossal marble statue of one of the apostles, on a high pedestal. Above the arcades runs a narrow projecting gallery with quatrefoil panels, supported on small consoles, but no triforium. The clerestory is high, and is pierced with a single tall pointed window over each of the nave arches. From the wall of each aisle project five small round apses used as chapels, and between them are tall pointed two-light windows with simple tracery in the heads filled with stained glass. The square of the crossing is marked by clustered piers, from which transverse arches are thrown across the nave, transept and choir. The choir is rectangular and is lighted by a tall pointed two-light window with simple tracery and covered, like the square of the crossing, by a simple four-part vault; the other portions of the church having open wooden roofs. The framing of the nave roof is visible and was formerly richly ornamented. The walls and piers throughout are banded alternately in black basalt and greenish-yellow limestone from quarries in the vicinity. Opening from each transept arm is a large rectangular chapel, of which the southern, dedicated to the Madonna di S. Brizio, contains on the walls and ceiling some of the most admirable frescoes of Fra Angelico and Luca Signorelli.

The exterior is, with the exception of the front, banded like the interior in white and black marble. The aisle walls show the five projecting apses on each side, decorated with slender engaged shafts ending in arched corbel-tables, and covered by conical roofs just under the cornice of the aisle. The clerestory wall is also divided by slender shafts, each bay containing a tall pointed-arched window. The transept and east end are bare.

The façade, with its three pediments, 132 feet wide and 160 feet high, is

sumptuously decorated with sculptures and mosaics; and is said to be the largest and most gorgeous polychromatic monument in existence. It is of white marble, in three divisions, corresponding in width to the nave and aisles, but entirely belying their outline, separated and flanked by strong, square buttresses, their faces decorated with long traceried panels, rising through the front and terminating above the roofs in massive crocketed pinnacles. At the base of each of the three divisions is a deeply splayed doorway, that in the middle round arched, those at the sides pointed, but all decorated with delicate twisted jamb-shafts and arch-mouldings, and surrounded by bands of mosaic. The arches are covered by high gables with crockets and finials. A slight and graceful arcaded gallery, with cusped round arches carried on pilasters and covered by gables, crosses the front above the doorways. Over this gallery the wall-space of the central division is occupied by a fine traceried rose window, with decorated border and spandrels of mosaic, set in a square of small quatrefoil panels enclosing heads in high relief, and enclosed on the sides and above by ranges of niches containing statues, single and in groups. Each of the three divisions is terminated by a high, crocketed gable. But the characteristic feature of this façade is its decoration. The great piers between the doorways, and those at the angle of the front, are covered with a network of branching vines enclosing crowded figure-sculptures, in many respects characteristic of the transitional style preceding the Renaissance. They are by Giovanni da Pisa and other pupils of Niccolò Pisano, and represent scenes from the Old and New Testaments. The hollows of the spiral shafts of the great doorway are filled with mosaics in geometrical patterns; a triple band of the same character surrounds the opening of the central doorway. The gables, the rose window, and other prominent features of the front are outlined in a similar manner, while the gables themselves, both those of the doorways and those terminating the façade, and the whole of the wall space above the doorway arches, are entirely



XI.

Central Doorway of Orvieto Cathedral.

covered with pictured mosaics on a gold ground, of various periods, from the fourteenth to the nineteenth century, and of admirable workmanship. Above the principal portal is a Madonna under a canopy, in bronze, by Andrea Pisano. On the margin of the large square panel, in the centre of which is a rose window, are small marble statues of prophets; and above, of the twelve apostles, executed by Sienese sculptors.

The whole front has, since 1880, undergone a complete restoration. It has little logical connection with the church behind it, but is a mere architectural frontispiece, of which the central gable is forty feet or more above the nave roof, and the side gables are, perhaps, twice as high as the roofs of the aisles behind them; but as an independent architectural composition, whose keynote is its polychromatic decoration, it is without a rival.

In the marble panels at the sides of the doors of the façade of Orvieto, executed by Giovanni da Pisa and his co-workers (Plates XI., XII. and XV.), the stone is laid, "*rampant*," as Ruskin calls it, or with its natural bed vertical, instead of horizontal.

He refers to Violet-le-Duc as authority for the statement that one great condition of the Gothic structure is that the stones shall be *en de-lit*, or set up on end. The ornament then,—which, on the stone, laid on its natural bed or *couchant*, was only flowing, or covered the surface or moulding,—on the erected stone begins to climb also, and becomes, in the most heraldic sense of the term, *rampant*.

He takes this set of panels as an example of a class of masonry which he broadly calls "Cyclopean," in which the joints are reduced to the minimum width, and as little dependence as possible put upon cement. They are laid with the same nicety and precision which was carried to the extreme in the masonry of the Parthenon; and the blocks shaped and "dove-tailed" together in such a way that gravity alone makes the structure secure.

In work of this class the laying of the stones is so beautiful that their joints become a subject for admiration, and a great part of the architectural

ornamentation lies in the beauty of these finely drawn lines of separation. In the brick work of Siena, in the gateway at Lucca, in a window at Orvieto, in a vault at Verona, and in the refectory at Furness Abbey, these separating lines are, according to Ruskin, a main source of pleasure in the building. He says: "Virtually, you will find that the schools of structural architecture are those which use cement to bind their materials together, and in which, therefore, balance of weight becomes a continual and inevitable question. But the schools of sculptural architecture are those in which stones are fitted without cement, in which, therefore, the question of fitting or adjustment is continual and inevitable, but the sustainable weight practically unlimited." The work in Orvieto, now under consideration, belongs, of course, to the second class, or "sculptural architecture."

Giovanni da Pisa was the son and successor of Niccolo Pisano, to whom Ruskin attributes the beginning of the Italian Gothic style. A most interesting account of this early transitional step will be found in the first lecture in his "Val d'Arno"; and of the influences under which Niccolo and Giovanni worked in the development of the beautiful Tuscan style of which the churches in Pisa, Orvieto, Florence and Siena are examples. The sculptures, which cannot be studied to advantage in the small reductions shown in our plates, are beautiful in conception and workmanship, and among the finest of this wonderful collection of art treasures. Ruskin attributes the delicate tracery of vines to German influence, which was evident in Giovanni's work at this time.

Ruskin uses the striped masonry of Orvieto cathedral as a text for an elaborate argument, upholding the method of laying stone as it is found in the quarry, with its natural cleavage surface horizontal; or, as we say, on the natural bed; and draws a comparison between the effect of this distinctly stratified look and the solid appearance of cliffs where the horizontal divisions of strata are marked. In this case, of course, he returns to the consideration of the building as structural architect-



XII.

Door at Left of Centre, Façade of Orvieto Cathedral.

ure, leaving out the façade, which is not striped.

"Those of you who, interested in English Gothic," says he, "have visited Tuscany, are, I think, always offended at first, if not in permanence, by these horizontal stripes of her marble walls. Twenty-two years ago I quoted, in Vol. I. of the 'Stones of Venice,' Professor Willis's statement that 'a practice more destructive of architectural grandeur could hardly be conceived;' and I defended my favorite buildings against that judgment, first by actual comparison in the plate opposite the page, of a piece of them, with an example of our modern grandeur; secondly (Vol. I., Chap. V.), by a comparison of their aspect with that of the grandest piece of wall in the Alps,—that Matterhorn in which you all have now learned to take some gymnastic interest; and thirdly (Vol. I., Chap. XXVI.), by reference to the use of barred colors, with delight, by Giotto and all subsequent colorists.

"But it did not then occur to me to ask, much as I always disliked the English Perpendicular, what would have been the effect on the spectator's mind had the buildings been striped vertically instead of horizontally; nor did I then know, or in the least imagine, how much *practical* need there was for reference from the structure of the edifice to that of the cliff, and how much the permanence, as well as propriety, of structure depend on the stones being *couchant* in the wall as they had been in the quarry: to which subject I wish today to direct your attention.

"You will find stated, with as much clearness as I am able, in the first and fifth lectures in 'Aratra Pentelici,' the principles of architectural design to which, in all my future teaching, I shall have constantly to appeal: namely, that architecture consists distinctively in the adaptation of form to resist force;—that practically, it may be always thought of as doing this by the ingenious adjustment of various pieces of solid material; that the perception of this ingenious adjustment, or structure, is to be always joined with an admiration of the superadded ornament; and that all delightful ornament is the

honoring of such useful structures; but that the beauty of the ornament itself is independent of the structure, and arrived at by powers of mind of a very different class from those which are necessary to give skill in architecture proper."

## -IX.

## FACADE OF ORVIETO CATHEDRAL.

The very evident lack of connection between the façade and the remainder of the church is shown clearly in this view; and a suggestion is given of the effect of color.

## X.

## NAVE AND AISLES OF ORVIETO CATHEDRAL.

The almost severe simplicity of this interior contrasts strangely with the overloaded decoration of the artificial front. It has some Gothic features but is not Gothic in spirit. It shows how differently the builders in the South treated the same problem, which in the North produced the cathedrals of France, England and Germany.

## XI.

## CENTRAL DOORWAY OF ORVIETO CATHEDRAL.

Taken by itself this doorway is unquestionably one of the greatest masterpieces of Italian Gothic architecture. Delicacy and refinement of detail could hardly be carried to greater perfection. The beautiful engaged twisted shafts, shown in Plate XIV., and the mouldings, as well as all the flat surfaces, are covered with a wealth of mosaic executed with a skill that is seldom surpassed.

## XII.

## DOOR AT LEFT OF CENTRE, FACADE OF ORVIETO CATHEDRAL.

## XIII.

## SHAFTS IN THE JAMB OF LATERAL DOOR, ORVIETO CATHEDRAL.

## XIV.

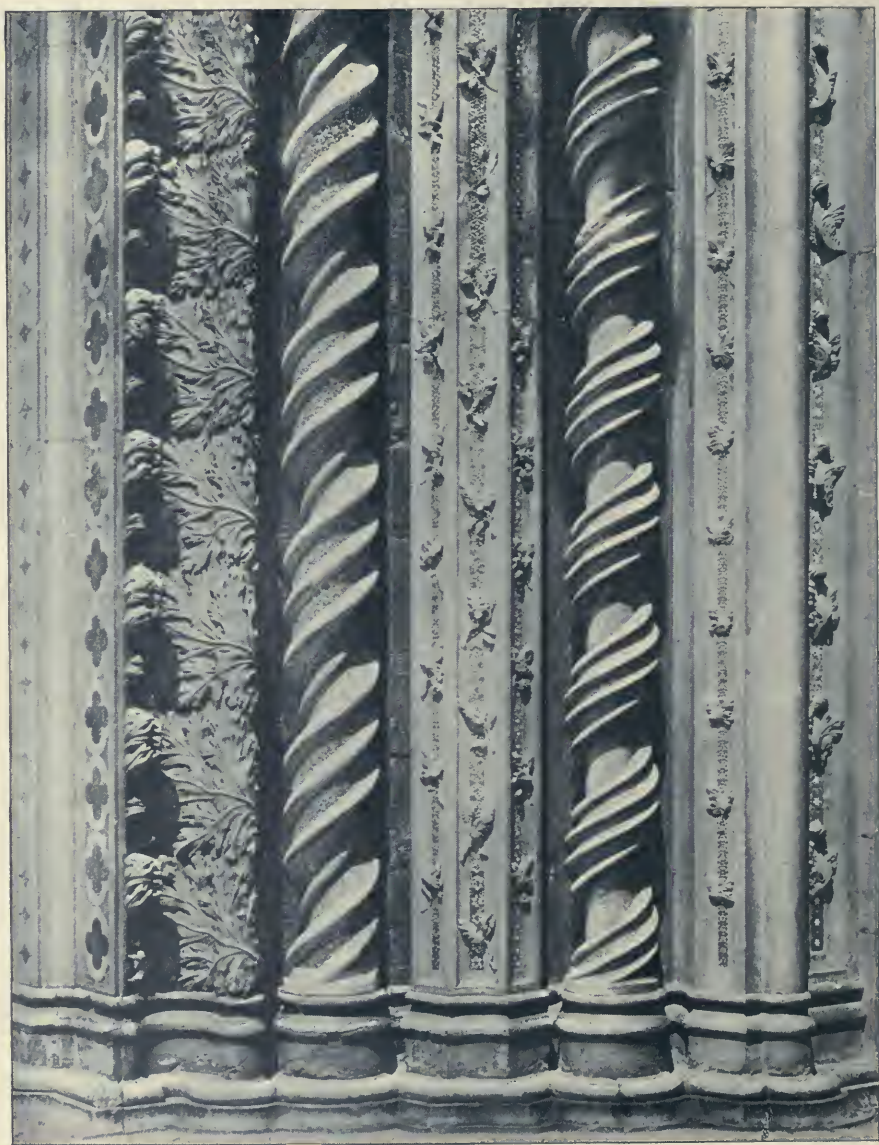
## SHAFTS IN THE JAMB OF CENTRAL DOOR, ORVIETO CATHEDRAL.

## XV.

## PANEL IN FACADE OF ORVIETO CATHEDRAL.

## XVI.

## SOUTH DOOR OF ORVIETO CATHEDRAL.



XIII.

Shafts in the Jamb of Lateral Door, Orvieto Cathedral.

# The Brochure Series

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"The Motiv," an association of architectural students in Berlin, has just celebrated the fiftieth anniversary of its existence. It is a curious coincidence that this, the principal society among German architectural students, should have been formed in the same year and month as the "Architectural Association," which holds a corresponding position in England. The latter, however, sprung from an independent initiative among the students themselves; while the German society owes its organization to the efforts of the late Professor William Stier, the popular master of the old Building Academy at Berlin. Almost all the members of "The Motiv" are students in the Royal Technical College, which is the German Government School.

The members of "The Motiv" have a "coaching class," designed to render mutual assistance in preparing students for the college and for professional examinations. To this end they publish model test-papers, and a catechism, and tutor backward pupils.

The anniversary exercises, which combined various official and social gatherings appropriate to the occasion, began with a memorial service at the grave of Professor Stier. A special anniversary number of the society's publication will be issued.

During the past season, a new working-club, mainly composed of the more advanced architectural draughtsmen, has been formed in New York. Its meeting for organization was held in the office of Messrs. Brunner & Tryon;

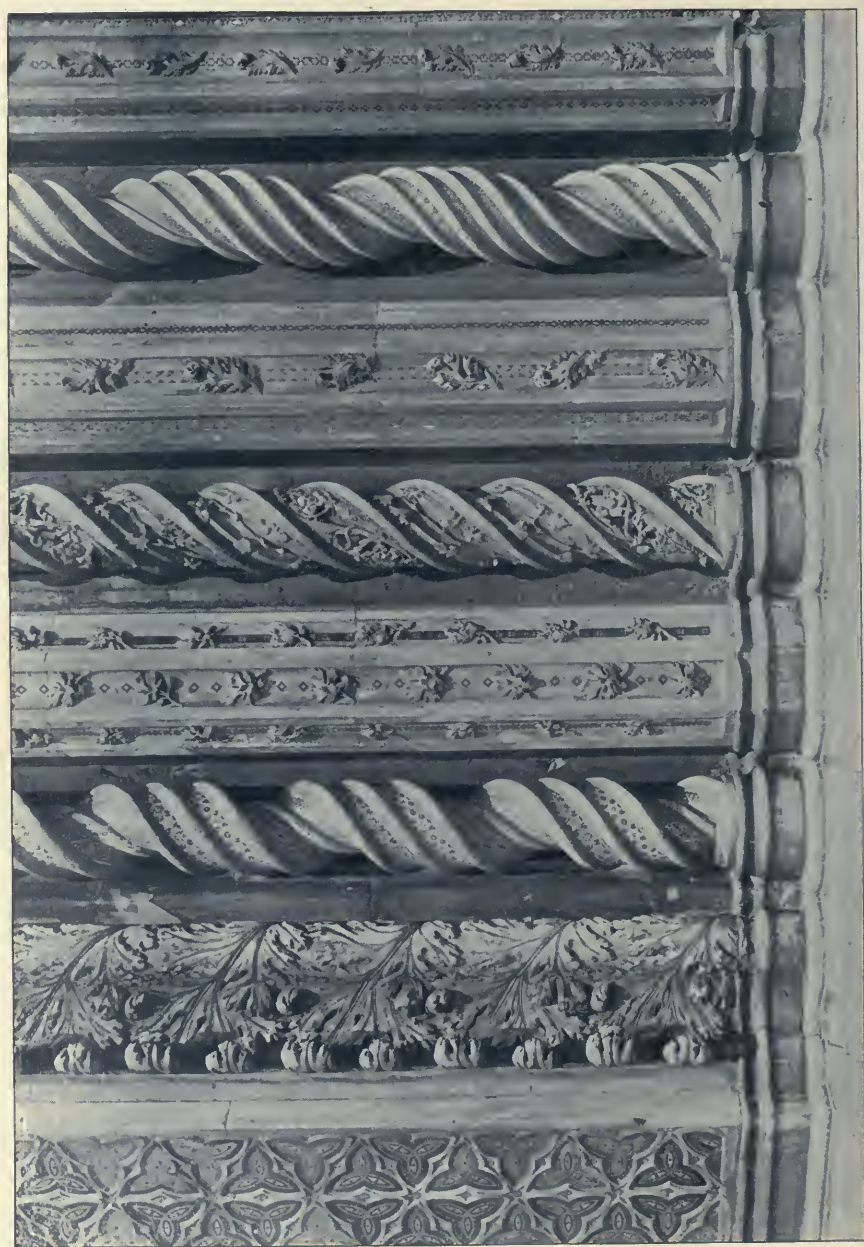
the name "The Acropolis Club" was adopted, and the following officers and committee of management were chosen: President, Thomas Eagleson; Secretary, C. H. Acton Bond; Treasurer, George M. Bartlett; Committee, C. H. Acton Bond, T. R. Johnson, John R. Kauf, B. Van Benthuyzen, George M. Bartlett and C. G. Poggi.

The plan of work was laid out along similar lines to those adopted by the "Architectural League," although limited in application and purpose to the needs of architectural draughtsmen. It was decided to form two classes immediately: one to work out the problems of the "Beaux-Arts Society" under the critical direction of Mr. Thomas Hastings, and the other to draw from the figure under Mr. George W. Maynard.

The "Acropolis" first talk, accompanied by a practical demonstration, was given by Mr. Hawley; and at the close of the evening he presented the club with a drawing of his own,—a scene from an old French town.

This organization starts with the promise of accomplishing good results, and its membership is the best evidence of the serious purpose of the undertaking.

A noteworthy exhibition of architectural drawings was held early in the winter at the rooms of the Architectural League in New York, and later at the gallery of the St. Botolph Club in Boston. It consisted of the drawings of the several students who have been connected during the past two years with the American Academy in Rome. The work showed the results of study and research relating to Roman, Greek and Renaissance architecture by the holders of American scholarships—work required as evidence of the industry and fidelity of these students. The architects represented were Harold V. B. Magonigle, Rotch Travelling Scholarship, Boston; S. J. Temple, Columbia Travelling Scholarship, New York; G. B. Page, University of Pennsylvania Travelling Scholarship, Philadelphia; J. R. Pope, Columbia Travelling Scholarship, New York, Prize of Rome; W. S. Aldrich,



Rotch Travelling Scholarship, Boston; Percy Ash, University of Pennsylvania Travelling Scholarship, Philadelphia. The work of A. P. Proctor, sculptor, and holder of the Rinehart Scholarship, Baltimore, and that of G. W. Breck, painter, and holder of the Lazarus Scholarships, New York, was also included.

The most widely known of these exhibitors is undoubtedly Mr. Magonigle, and his later drawings fully bear out the promise of his earlier years. There is a precision and delicate expression of form in his line drawings, which few draughtsmen can approach. Mr. Pope, Mr. Page and Mr. Aldrich have done most excellent work; and all the drawings, compared with similar collections of former years, show a sure advance in industry and intelligence among our foreign students.

Three diplomas were awarded last year to American architectural students who had completed satisfactorily the required course in the Ecole des Beaux-Arts in Paris—the first Americans to receive this honor. This year one more name is added to the list, that of Mr. Hugh Tallant; and two more candidates from the ranks of the Americans now in the school for degrees are expected to present themselves.

The admission examinations for the Beaux-Arts are growing each year more and more exacting because of the number of aspirants and the limited accommodations of the school. At the trial in April but six Americans were admitted, and in the later examination still greater restrictions will be enforced; for it is announced that only five places will be distributed among more than fifty foreign applicants. Probably not more than five of these will be Americans. In the past, ten foreigners have been received at each trial.

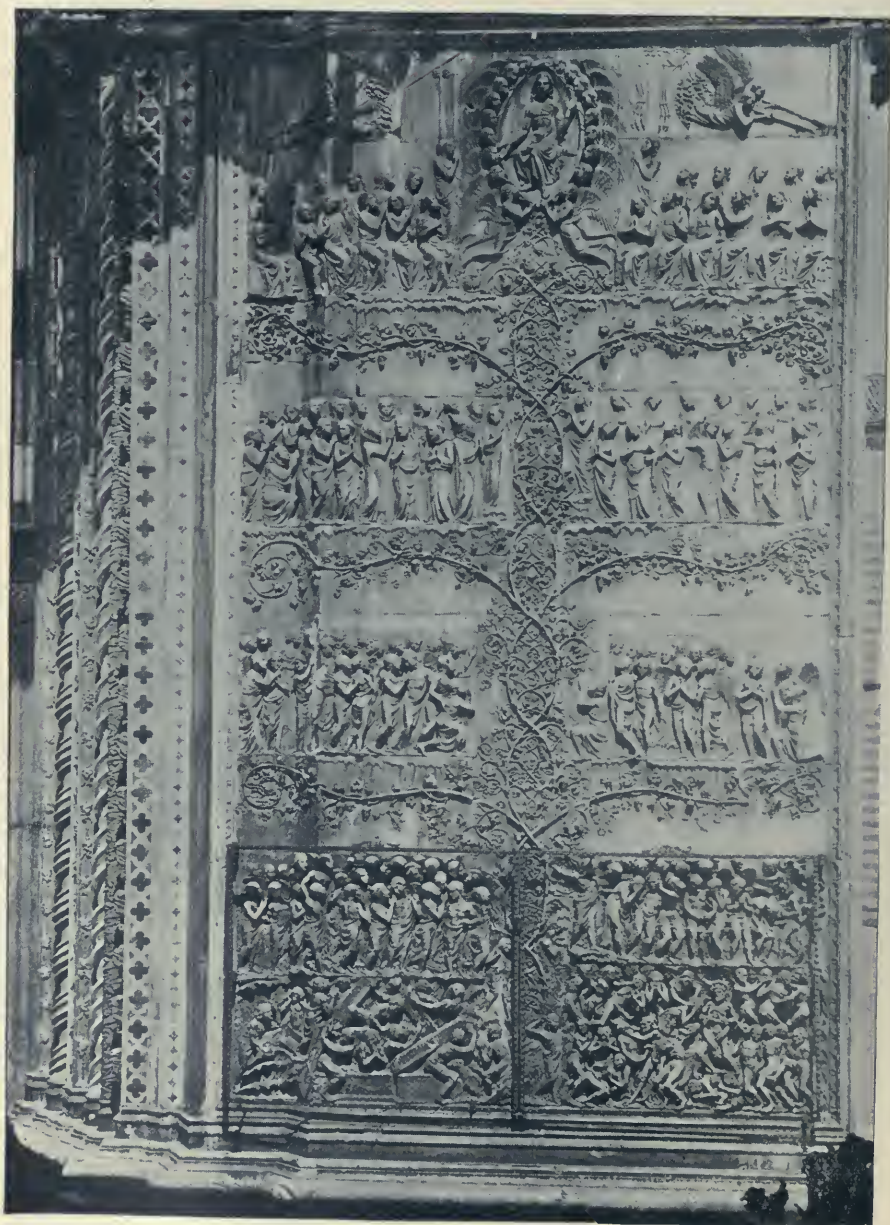
### Notes.

Can any of our readers give a good reason for setting sash pulleys into the sides of window frames? It is one of

those customs that has become general because no one has happened to think of a better method. The Folsom Snow Guard Company, whose ingenious little wire guard has replaced the unsightly and ineffective guard rail for roofs, is putting upon the market an overhead pulley that has many advantages over the old-style side pulley. As one of the best evidences of the merit of any device is the class of work it has been used in, we take pleasure in calling attention to the fact that this overhead pulley has already been used on the D. O. Mills hotels, Hotel Renaissance, Commercial Cable, Bowling Green, Gekin, Bank of Commerce, Queen's Life Insurance, Western Electric and Weld buildings, New York, Phoenix and Mutual Life buildings, Hartford, and many fine residences. Among the architects who have specified it are Geo. B. Post, R. H. Robertson, Ernest Flagg, W. & G. Audsley, C. L. W. Eidlitz, Cady, Berg & See, Jas. B. Baker, Howard & Cauldwell, and Renwick, Aspinwall & Owen of New York, and Kendall & Stevens, Rand & Taylor, W. G. Preston, J. L. Faxon, Loring & Phipps, and Franz Zerrahn of Boston.

The favor which our Japan prints of Chas. Herbert Woodbury's pencil drawings found among architects and draughtsmen, has encouraged us in offering a set of twelve larger prints that are perfect fac-similes of the original drawings. These are 11x14 in size, and only two of the drawings are contained in the earlier set. The price of the set is \$3.00, postpaid. No draughtsman who desires to become skilful with the pencil should omit a study of Mr. Woodbury's work; and this set of prints is in every way as good as the originals.

Horticultural building work is a specialty that architects had best leave wholly to some house of long experience in this particular line; consulting with them, perhaps, as to the general plan and outward appearance, but stopping there. It will interest our readers,



XV.

Panel in Façade of Orvieto Cathedral.

however, to know how this class of building is constructed by one of the old firms of greenhouse builders; and we have selected as an example, a palm house at Morristown, N.J., built by Hitchings & Co. of New York, who have been doing this work for over half a century. The palm house itself is 28x26 feet, with wings 20x19. It is connected with a rear house 42x19, which has cold frames attached. The general outline is kept very simple, broken only by the entrance. It is constructed with an improved iron frame, designed to secure the required strength with the

Double thick, second quality French glass, properly bent for the curved portions, is used throughout; that on the palm house being ground to prevent the burning effect of the sun. Hitchings & Co. make their own heating apparatus, which gives perfect satisfaction under all conditions of temperature and climate. The boilers have a corrugated fire-box and patent shaking and dumping grates, and are used in thousands of ordinary greenhouses. The heat is distributed through cast-iron piping in such a way as to secure the desired temperature in the different



Palm House, Morristown, N.J., built by Hitchings & Co.

lightest possible structure. A brick foundation underlies heavy cast-iron sills, to which are secured, by suitable iron feet, the combined posts and rafters, the latter bent to the radius of the roof and connected by light angle iron purlins. To these the wood glazing-bars are attached, the curved portion sawed to fit the curve of the rafters.

parts of the range. The ventilating sashes are operated by self-locking apparatus, covered by Hitchings' patents. Architects can feel safe in completely turning over to such a firm any greenhouse work they may have; for the long record of successful horticultural building that Hitchings & Co. can point to, is proof of their thorough skill.



XVI.

South Door of Orvieto Cathedral.





XVII.

Portions of the Pavement of the Siena Cathedral.

# THE BROCHURE SERIES

## OF ARCHITECTURAL ILLUSTRATION.

VOL. III.

MARCH, 1897.

No. 3.

### THE CATHEDRAL OF SIENA.

THE Cathedral of Siena, or *Chiesa Metropolitana*, situated on the crown of the hill, the highest point in the town, is said to stand on the site of an ancient temple to Minerva, which was in turn succeeded by a church of S. Maria Assunta. The present building was begun early in the thirteenth century, its dome was completed in 1264, and about 1317 the choir was prolonged to the east over the church of S. Giovanni, which stands on the hillside below, and has thus become a kind of crypt. Owing to certain structural defects,—to which the present irregularity of the edifice is, perhaps, partly due,—it was resolved, in 1339, to erect a huge nave, of which the present cathedral was to form merely the transept. Parts of this nave, designed in a beautiful style, still exist on the south side of the cathedral; but only in ruins, for after the plague of 1348 the more ambitious plan was abandoned, and the original structure was completed instead. The church measures about 291 feet long by 80 feet wide; the length of the transept is about 165 feet.

The façade—a combination of pointed and circular styles—from a design by Giovanni Pisano, is composed of red, black and white marbles; and is richly decorated with sculptures representing prophets and angels, by different masters. Mosaics, designed by Mussini and Franchi, were added in 1878. The

six-story campanile does not taper toward the top.

The interior consists of a nave and aisles extending to the choir, and is intercepted by a double transept with an irregular hexagonal dome over the centre. The impression produced by the alternate horizontal bands of colored marble in zebra-like stripes, the continuous rows of busts of the popes over the arches, and the pillars with half columns, is so striking as to be frequently found unpleasant. There is no question, however, about the beauty of the ornamentation.

The pavement, a chief point of interest in the cathedral, is unique; for though the pavements of the Baptistery, and those of the church of San Miniato al Monte in Florence, are made after the same method (see BROCHURE SERIES for May, 1895, Vol. I., No. 5, Plates XXXIII. to XL.), they are essentially different in the scheme of design. The Siena pavement consists of representation in marble, with black mastic cement inlays—a simple kind of tarsia work—of scenes from Old Testament history, executed in the liberal spirit of mediæval Christianity. The “Moses,” “Samson,” “Judas Maccabeus,” “Solomon” and “Joshua” are attributed to Duccio; while “Abraham’s Sacrifice,” “Adam and Eve,” “Moses on Mount Sinai,” etc., are by Beccafumi. The symbols of Siena and her allied towns, the “Hermes Trismegistus,” “Socra-



tes and Crates," "The Sibyls," and other figures, are by less celebrated Sienese masters.

The execution varies. The oldest scenes, dating from the period of the building, are portrayed in simple outline engraved on the white marble and filled with black cement. When Domenico Beccafumi was called upon to continue the work which had been begun by Duccio (?) the figures and historical representations were, for the most part, already designed on the marble, the outlines filled with cement, and the whole surrounded by ornaments of colored marbles. According to Vasari, Beccafumi amplified this method of treatment by adding gray marbles to represent the half-tones, and thus produced marble pictures in a comparatively complete scheme of light and shade. In a note to Mrs. Foster's translation of Vasari, however, it is stated upon the authority of an inscription on the tomb of Michelagnolo Vanni, that Vanni, who did not live until some time later, was the first to employ this process.

Vasari says further: "The portion of the pavement which Domenico Beccafumi had taken in hand by way of trial proved the attempt to have been entirely successful, whether we consider the beauty of the invention, the excellence of the design, which was most correct, or the rich variety of the figures; insomuch that the master may be said to have formed the commencement of the grandest, most beautiful and most magnificent pavement that had ever been achieved; and in the course of his life, he gradually conducted the greater part of it to completion."

Taking Vasari's premises, we may be prepared to grant the justice of the high praise given Beccafumi; but we may well question the propriety of using designs of this nature for such a purpose, and of executing them in the materials here employed. In his "Church Building in the Middle Ages," Mr. Charles Eliot Norton protests against the placing of such precious work where it must be trodden under foot as incongruous; and the fact that many of the original parts of the Siena

pavement, now cracked and worn, have been removed to the Opera del Duomo for safe keeping, and replaced on the cathedral floor by modern copies; and that for years it has been necessary to protect the floor against wear by boards, is evidence of the justice of such a criticism. There is also an aversion, well enough grounded, it seems to us, to the use of pictorial designs of any description for floors, although the feeling does not appear to have troubled mediæval architects. The purely ornamental and geometrical designs of the Roman and Byzantine builders, better related to the rest of the interior and better adapted to the nature of the material employed, are in all respects more logical.

"Independently of the artistic beauty of the designs," says Symonds, in speaking of this work, "of the skill with which the men and horses are drawn in the most difficult attitudes, of the dignity of some of the single figures, and of the vigor and simplicity of the larger compositions, a special interest attaches to this pavement in connection with the twelfth canto of the *Purgatorio*. Dante cannot have trodden these stones and meditated upon their sculptured histories. Yet when we read how he journeyed through the plain of Purgatory, with eyes intent upon its storied floor, how '*morti i morti, e i vivi parean vivi*,' how he saw 'Nimrod at the foot of his great work; confounded, gazing at the people who were proud with him,' we are irresistibly led to think of the *Divine Comedy*. The strong, simple outlines of the pavement correspond to the few words of the poet. Bending over these pictures and trying to learn their lesson, with the thought of Dante in our mind, the tones of an organ, singularly sweet and mellow, fall upon our ears, and we remember how he heard *Te Deum* sung within the Gateway of Repentance."

Of the impression made by the interior of this cathedral as a whole, Hawthorne has given, in his "French and Italian Note Books," a description, which, though fragmentary, and taking no account of the architect's point of view, is yet so graphic, so truthful, and



withal so charmingly appreciative, that we can do no better than end our account with his words.

"Another point," he writes, "to which the stranger's footsteps are drawn by a kind of magnetism, so that he will be apt to find himself there as often as he strolls out of his hotel, is the cathedral. It stands in the highest part of the city, and almost every street runs into some other street which meanders hitherward. . . .

". . . . I have been several times into the cathedral; . . . the whole interior is of marble, in alternate lines of black and white, each layer being about eight inches in width, and extending horizontally. It looks very curiously, and might remind the spectator of a stuff with horizontal stripes. Nevertheless, the effect is exceedingly rich, these alternate lines stretching away along the walls and round the clustered pillars, seen aloft, and through the arches; everywhere, this inlay of black and white. Every sort of ornament which could be thought of seems to have been crammed into the cathedral in one place or another: gilding, frescos, pictures; a roof of blue, spangled with golden stars; a magnificent wheel window of old painted glass over the entrance, and another at the opposite end of the cathedral; statues, some of marble, others of gilded bronze; pulpits of carved marble; a gilded organ; a cornice of marble busts of the popes extending round the entire church; a pavement covered all over with a strange-kind of mosaic work in various marbles; wrought into marble pictures of sacred subjects; immense clustered pillars supporting the round arches that divide the nave from the side aisles; a clerestory of windows within pointed arches;—it seemed as if the spectator were reading an antique volume written in black-letter of a small character, but conveying a high and solemn meaning. I can find no way of expressing its effect on me, so quaint and venerable as I feel this cathedral to be in its immensity of striped waistcoat, now dingy with five centuries of wear. I ought not to say anything that might detract from the grandeur and sanctity of the blessed edifice, for these attributes are really

uninjured by any of the Gothic oddities which I have hinted at. . . .

"I have done hardly any other sight-seeing except a daily visit to the cathedral, which I admire and love the more the oftener I go thither. Its striped peculiarity ceases entirely to interfere with the grandeur and venerable beauty of its impression; and I am never weary of gazing through the vista of its arches, and noting continually something that I had not seen before in its exuberant adornment. The pavement alone is inexhaustible, being covered all over with figures of life-size or larger, which look like immense engravings of Gothic or Scriptural scenes. There is Absalom hanging by his hair, and Joab slaying him with a spear. There is Samson belaboring the Philistines with the jawbone of an ass. There are armed knights in the tumult of battle, all wrought with wonderful expression. The figures are in white marble, inlaid with darker stone, and the shading is effected by means of engraved lines in the marble, filled in with black. It would be possible, perhaps, to print impressions from some of these vast plates, for the process of cutting the lines was an exact anticipation of the modern art of engraving."

XVII. TO XXIV.,  
PORTIONS OF THE PAVEMENT OF THE SIENA  
CATHEDRAL.

The figure subjects of this pavement, although of first interest to the traveller in Siena, are not of so much value as models or for suggestion to the designer and architect as the beautiful ornamental borders. Consequently, the subjects for illustration in our plates have been chosen from the ornamental portions only. The process employed in this work has already been sufficiently described in the preceding pages, and in the number of the *BROCHURE SERIES* for May, 1895, in which the Florentine pavements from the Baptistery and San Miniato were illustrated. The transitional character of this design is shown clearly by the examples. The forms are, for the most part, those of the Renaissance; but the manner in which they are used is more Gothic than otherwise, while the figure compositions are thoroughly Gothic in manner.



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## of Architectural Illustration.

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The St. Louis Architectural Club has instituted the happy custom of varying their bi-weekly assemblies by holding, once a month, a meeting at which the members appear in some unusual and distinctive style of costume. Recently, for example, dressed in knickerbockers, and smoking church-warden pipes, they kept "Dutch Night"; and the latest of these novel meetings, "Hard Times Night," was so especially successful that the *St. Louis Republic* devotes two illustrated columns to a detailed description of it, from which the following account has been condensed.

Imagine, says the writer, a large, long room, the walls hung with tapestries embroidered with the monogram of the Club, interspersed with water-color drawings and sketches, some of them competition designs submitted at one time or another by the members, some of them idyls, some of them caricatures. From the ceiling hang Chinese lanterns of every fantastic shape and of every color. Down the entire length of the room stretches a long table, spread with a white cloth. This table is lighted by candelabra — tallow dips stuck in the necks of ink bottles. Rows of yellow beer-steins, plates of sandwiches and other light refreshments, numerous short-stemmed clay pipes varied by a corn-cob or two, and immense tobacco-jars are scattered over the board. In front of the President's chair at the head of the table stand two objects of special interest: the presidential stein, representing a collection of volumes which bear on their backs the names of the old masters of architecture, and the gavel — an

empty quart whiskey bottle. Around this table are gathered, in what M. Bourget has called "unbuttoned attitudes," fifty or sixty men, arrayed in every conceivable style of picturesque tatters and cast-off finery; for this is "Hard Times Night" at the Architectural Club.

When all the members had arrived, Mr. Ittner, the President, thumping upon the table with his "gavel," subdued the roar of conversation; and read an address, outlining the work for the coming year. Mr. E. A. Farish followed with a paper on "Cabinet Finish vs. Mill Work"; and, to conclude the formal part of the programme, Mr. Fred Fox gave a most interesting lecture on "The Architecture of Rome," illustrated by stereopticon views.

Then came fun of a different sort. First of all the supper was disposed of; and, when steins had been refilled, and pipes relighted, the "Orchestra," composed of members of the Club under the direction of Mr. Ben Trunk, played something from Verdi. Then, with a pipe between his teeth, Mr. Oscar Enders rose; and, shouting instructions to the orchestra, pulled a type-written sheet from his pocket, and sang fourteen verses, full of local allusions and personal hits on his fellow members, to the tune of "Upidee"; and the entire Club joined in the chorus. As an encore, Mr. Enders repeated a song he had produced at the last meeting, detailing the efforts of a certain "Billy Bailey" to win a certain medal.

But Mr. Bailey had his turn. Springing to his feet, and requesting the orchestra to play over "King William was the Best of Men," that he might "catch the time," he started in on a retaliating song; and without a pause, sang thirty-two verses, in which he "roasted" every member of the Club; especially getting back at his friend Enders, who had so lately held him on the gridiron. But hardly had he sat down amid cheering and laughter, when, suddenly remembering a verse that he had not sung, he again rose, and insisted that he be allowed to sing it. Permission being finally



granted, the omitted verse proved to have President Ittner for its subject.

And so the evening passed, with impromptu songs and impromptu speeches—an evening, concludes the writer, difficult to describe in such a way as to reproduce the spirit of unconventionality and good fellowship by which it was characterized.

## The Royal Technical College, Berlin.

Mr. Edwin O. Sachs, an English architect, recently described in a paper read before the Congress on Technical Education in London, the organization and work of the architectural school of the Royal Technical College in Berlin. This college is the leading school of its kind, according to Mr. Sachs, in Germany, or in German-speaking countries. It is essentially a university, its students now numbering, in the various departments, nearly three thousand; and ranking in their characteristics and pastimes as university students. In its present organization it has existed only since 1884, when the old Architectural Academy of Berlin and the Engineering Academy were amalgamated. Both these schools were owned, and practically managed, by the government as the property of the Prussian people. The new institution is also essentially a Prussian one, on which the government spends annually a considerable sum of money, the professorships being the gift of the king.

The old Architectural Academy officially dates from April 8, 1799; and was primarily intended for the training of government architects and engineers. In its early years it was a scientific school of a practical nature only, paying no attention to architecture as an art. In 1828 under Professor Stier the artistic side of architectural training first received the attention it deserved, and a new building with larger accommodations was furnished. From that time to the reorganization the plan of work has remained unchanged, although undergoing gradual development. In order that the college may offer the best

opportunities for the most efficient education, the executive retains the leading men of the time for its professional chairs.

"The Royal Technical College is housed in what is undoubtedly the finest building ever devoted to an educational establishment of this description," says Mr. Sachs; "in fact it is quite a palace, having considerable architectural pretensions." We quote at length a portion of his paper:

"It cannot be too much impressed on those who have witnessed our technical classes carried on in almost squalid surroundings, how important it is that we should give to technical students a home which in every way embodies the achievements of this age of progress in technical science and does credit to the period of architecture to which it belongs. I should much like to describe the beautiful building and its practical equipment, which might well serve as a model to the world, though its conception is perhaps almost too elaborate and too costly from an economic point of view. I must however, content myself with saying that its dimensions are approximately 700 ft. by 300, that it has five courts, of which the central one is covered in, and that it has four stories, all of considerable height. Its lecture-rooms are spacious and numerous, and its classrooms and studios thoroughly serviceable and well lighted. The number of students for which it was intended was 2,000, and today, although there are 2,913 on the books, it still admirably fulfils its purpose; but the popularity which its educational facilities have won for it, will, no doubt, soon compel a considerable extension.

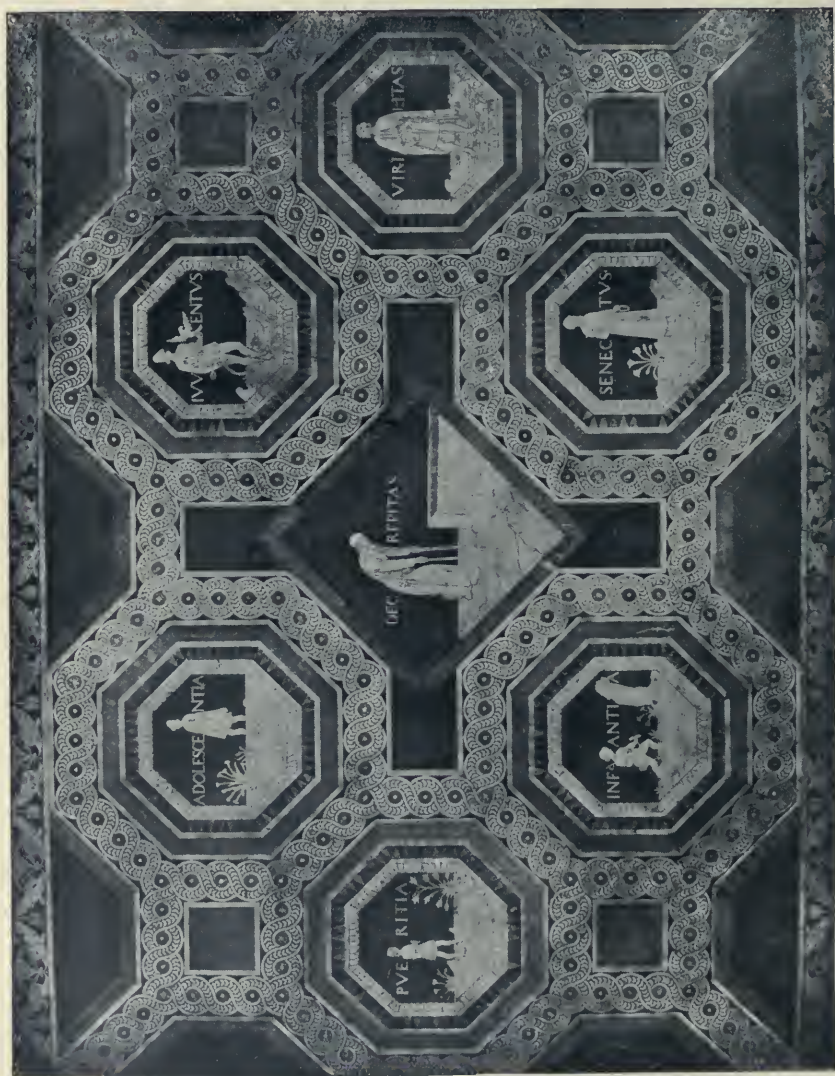
"But, turning now to the courses available for students of the architectural section, I ought first to say that, besides the subjects taught in the architectural division proper, much that is valuable is to be learned from the civil engineer's department, in the general technical classes, etc., and special facilities are afforded to the architectural student for attending suitable lectures in other sections. The architectural division has eight ordinary and twelve extraordinary professors, and fifteen



tutors, headed, as I have said before, by a divisional chief elected from among the professors. The courses available include a large number of different lectures on various periods of architectural and art history; further, elementary and advanced drawing, free-hand, perspective, geometrical and architectural draughtsmanship, water-color work and modelling. Then, again, there are classes for the general planning of private dwellings and public buildings of all descriptions, for design in various specific styles, and for divers purposes, the designing of ornament, of furniture, of lead-glazing, metal-work, etc. In addition to these, there are exhaustive lectures on the evolution of particular features in design, such as that of ornament; while among the more practical subjects every form of construction is taught, from the simplest brickwork to the most complicated iron roofing. The characteristics of different materials are also important subjects dealt with, as are heating and ventilation. Special forms of building are also treated as separate subjects, as well as the various equipments. For instance, we find lectures on the necessary appliances for hospitals, prisons and libraries. Building legislation is, moreover, not overlooked. Turning to the lectures which are given in other sections, we find those on mathematics, physics, statics, geology, chemistry, book-keeping, and general elementary law, included in the curriculum of the general science division; and in another department the housing of the working classes—in fact, there are few German requirements which are not fully attended to at this college. I use the expression ‘German requirements’, advisedly, for sanitation, which really occupies a very secondary position in a German architectural practice, receives scant treatment at this institution. And again, the measuring up and sketching on the spot, which we consider so important, the German architect does not appear to appreciate; and, as a subject of study, it is almost overlooked in the Berlin curriculum. Of course, the student has to select his own subjects, and to distribute them over the four years which he spends at the

Technical College; and if we turn at random to lists of subjects taken up by a first year man on, say Tuesday, we may probably find that in the forenoon he attends lectures of an hour each in mathematics, elementary construction, and a class in elementary drawing; and in the afternoon, perhaps, a lecture of one hour on geology of materials, followed by a class of elementary draughtsmanship of from two to three hours’ duration, including, say, instruction in the classic orders. If we were then to take a fourth year student’s list for the same day, we might, on the other hand, find a two hours’ lecture on the history of architecture, and a two hours’ class on design in the Renaissance style; then in the afternoon he may give a couple of hours to practical design, such as the planning of public buildings, and attend an hour’s lecture on heating and ventilation. From these examples it will be seen that in the earlier stages of the Berlin student’s work, he seeks to obtain a foundation in draughtsmanship and science; while at the latter end of his course, he devotes most of his time to the designing of buildings, some historical study, and to gaining a knowledge of special equipment. It would no doubt be interesting to follow the architectural student’s career from year to year or from term to term, but this would take too long; and I therefore only quote a couple of examples from a student’s time-table:

“But now, after these historical and descriptive notes on the Royal Technical College at Berlin, I would ask if there are any advantages in the system of architectural education adopted by the Prussian Government. To my mind, though the opportunities for study are delightful, there is obviously something wanting in the whole system. Every preparation is made for the student to obtain knowledge, yet the result is by no means as satisfactory as might be expected. Does not this arise primarily from the student starting fresh from school without any previous elementary practical knowledge of construction? He has never been on a building in course of erection, and does not know the difference between a piece of oak and a piece of deal. Further,



owing to his not having seen an actual moulding cut, he has no idea of the method of its production. For four long years he spends nearly the whole of his time in theoretical study, and, as far as my own experience goes, there are but few men who utilize even the smallest part of their leisure in getting some idea of the nature of practical work. Does not a school where merely the theory of architecture is taught have a tendency to produce an architect of an academic character? Of course, there may be the usual exceptions of brilliant and talented men, or those who are ambitious and energetic and who do not follow the lines laid down for them.

"As to the remedy for any unsatisfactory results, would it not be advisable that a boy should have a whole year's practical work in an office, with the run of some works for at least six months before he starts his elementary studies at the college; and should not every six months of theoretical study be interspersed with three months of practical work? Should not lessons in design be accompanied by lessons in the measurement of existing buildings, to enable the student to grasp the appearance of what he is putting on paper? Would it not be well, too, that the instructors should one and all be men actually in extensive practice?

"We have had under consideration an establishment organized on the most elaborate lines, in which there is but little left to improve, as far as the syllabus of the classes is concerned. The Berlin Technical College has been on its trial for over twelve years; and the results, to my mind, are not at all proportionate to the amount of time and money expended by the architectural student and the Prussian Government. Indeed, as the Berlin Technical College is in many respects a model to those advocating architectural education, so it must also serve as a warning to those extremists who would advocate merely theoretic study as the primary basis of a training in architecture and its actual practice. Much as we can learn from leading men in special technical subjects, the Berlin College only too plainly shows what harm can be done by taking

an able man entirely away from his profession, and thus preventing him from keeping in touch with that practical work which brought him into prominence.

"I would conclude by saying that the architectural school at the Royal Technical College of Berlin is an institution well worthy of our attention, and in many respects of our imitation; but, at the same time, we must observe the disadvantages of too theoretical an education, and its evil effect upon a student destined for actual practice. What I have said with regard to the architectural school, I believe, holds good in many respects for the several engineering divisions of the same college."

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### Notes.

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"Of making many books," said Solomon, "there is no end;" and the phrase might be altered to comprehend "novelties" in drawing materials. Some of them pay for the trying—some of them don't. When, however, a novelty appears that bears the name of an old and conservative house, the chances are that it has merit as well as mere newness.

A case in point is Winsor & Newton's soft white india-rubber. We are all familiar with the hopeless slipperiness of ordinary erasers on tracing paper, and with the sponge-rubber's tendency to smut. Neither of these objections can be urged against Winsor & Newton's new soft white rubber. This old and well-known house has an American office at 88 Fulton Street, New York; and full information concerning this soft white rubber, with a catalogue of their line of standard drawing materials, can be obtained by writing to this address.

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The Shull overhead pulley is the perfect sash pulley for mullioned windows, for by its use no space need be allowed in the mullions for weights, all the weights being hung at the sides of the group of windows. Diagrams and a description of this method of hanging mullioned windows will be sent to any inquirer by the Folsom Snow Guard Company, Boston.



XXIV.

Portions of the Pavement of the Siena Cathedral.





XXV.

Pilaster Capital, Church of San Spirito, Florence.

# THE BROCHURE SERIES

## OF ARCHITECTURAL ILLUSTRATION.

VOL. III.

APRIL, 1897.

No. 4.

### CAPITALS FROM S. SPIRITO, FLORENCE.

THE church of S. Spirito, together with its monastery, was built in 1292 by the Augustinians, and was at that time an institution of considerable size and importance. With increasing population a larger edifice was, however, found desirable; and in 1433 work was begun anew under the direction of Filippo Brunelleschi. A number of difficulties prevented the immediate carrying out of his design, among which was the complete destruction of the building by fire when nearly finished. It was, however, rebuilt from the original models after Brunelleschi's death. Brunelleschi was in the habit, it was said, of making only a rough model for his buildings, leaving details vague and uncertain, and giving his directions to the masons as the work proceeded, altering and modifying the design. "This," says Horner, "must account for various defects in S. Spirito, which some critics have attributed to one Antonio Manetti, a workman who had been a pupil of Brunelleschi, but who later set up as his rival, and ventured to disparage his designs." In spite of defects, nevertheless, the church is a fine example of the master's design. Its erection required more than twenty years. The cupola, designed by Salvi d'Andrea, was finished in 1482. The sacristy was added in 1488 from a design by Giuliano di San Gallo, and the beautiful little vestibule which con-

nects the sacristy with the church and cloister, was the joint work of Simone Pollajuolo (surnamed Il Cronaca) and Giuliano di San Gallo. The sculpture of the interior was executed by Jacopo Sansovino. The cupola of the sacristy was designed by Antonio dei Pollajuolo. Frescoes, decorations and enrichments of all descriptions were added by the foremost artists of the time, until the building, like so many others of this period, is a monument to the memory of some of the greatest names of the Italian Renaissance.

It was in the church of S. Spirito that Martin Luther preached as an Augustinian friar when he went to Florence on his road to Rome. His name was inscribed in the books of the monastery, but the library was dispersed after the suppression of the Italian monasteries by the French, towards the end of the last century.

The interior of S. Spirito is very effective from its simplicity and large and beautiful proportions. It is in the form of a Latin cross, 315 feet long and 191 feet across the transepts. The aisles are carried round the nave and transepts by a line of columns with Corinthian capitals. The chapel floors are raised a step above the pavement of the nave, which peculiarity Brunelleschi is said to have copied from the little church of SS. Apostoli, which he so greatly admired that he refused to admit an error in the composition. The choir in the centre is a marvel-



XXVI

Pilaster Capital, Church of San Spirito, Florence.

lously rich display of costly marbles and elaborate workmanship, but is lacking in refinement. It was built during the reign of the Grand Duke Ferdinand I. in 1599, by the Senator Giovan Battista Michelozzi, who employed Giovanni Caccini to carry out the work in mosaic. The manufacture in Florence of *pietra-dura*, or mosaic, was then controlled by the government, having been introduced as a royal industry by the Grand Dukes Francis I. and Ferdinand I. The rich detail of the choir, altars and chapels will well repay careful study, although there is ample room for criticism in the more important considerations of mass and distribution.

Sansovino's beautiful detail is well illustrated in the series of delicate but extremely vigorous and masterly pilaster capitals from the sacristy shown in the plates of this issue. There are few examples of this treatment which can surpass them in design and execution. The form of the bell is remarkably vigorous, and at the same time has a subtlety of line which is almost equal to the work of the best Greek period. The acanthus is of the best Renaissance type, strongly and crisply modelled and well distributed. The volute form suggests the Roman Composite capital, but there is a virility in these examples which the Romans failed to attain. Although in some instances there is a very marked departure from classic models by the introduction of figures, masks, festoons and vases, this is done with so much restraint and thorough appreciation of balance and fitness to the general form that it adds to the interest of the series as a whole, and cannot be considered otherwise than as an improvement.

The capital is the portion of an architectural order which most frequently gives the suggestion by which one order is distinguished from any other. It cannot be said that it is the distinguishing feature, for there is no one characteristic which marks an order as different from any others. The distinction is very complex, and is the result of differences in both proportion and detail. But, to the casual observer, the capital is the first feature to attract attention, and is the most familiar dis-

tingtion, even to the cultivated student. Although the proportions and details of the classic orders may be used without columns or pilasters, and the name "order" be properly applied to the resulting structure, it is customary to consider the column or pilaster as an essential element of an order. The Greek anta or pilaster was the ornamental finish applied to the wall of a structure as a transition from the wall to the colonnade. From the time of the Greeks to the present this has been the accepted treatment in classic and Renaissance buildings. The Renaissance architects, however, adopted the pilaster as an independent decorative feature, and varied its proportions and design to suit their requirements. The pilaster is often spoken of as the projection or development of a column. In fact it is neither, but is, rather, a compromise between the two. Its proportions, to harmonize with a corresponding column where it is used in the manner of the best Greek or Roman examples, differ materially from those of the column. The shaft is sometimes wider at the base than at the top, and is sometimes made with entasis to correspond with the column; but, on the other hand, this correspondence is frequently disregarded, and the tapering shaft replaced by one of the same width from top to bottom, or even wider at the top than at the base. In Renaissance work this arbitrary treatment is constant in all details, despite the theoretical rules of Vitruvius, Palladio and Vignola.

From the time of the empire the Romans seldom used any but the Corinthian order. Richer than the others, well adapted to the large dimensions of their monumental buildings, it satisfied the demands of the Roman taste and requirements. But in the decadence of the empire the form of the classic capital became strangely perverted. A mixture, which is known as the *Composite*, was made from the Ionic and Corinthian capitals, but it is only a graceless amalgamation of two elements which were designed to be distinct. In the Composite capital the Romans introduced figures, winged victories and eagles; they ornamented the abacus,



XXVII.

Pilaster Capital, Church of San Spirito, Florence.

and in this important part of the decoration, sought rather rich elaboration than that refinement of profile which the Greeks had attained. When, under the Merovingian kings, the French wished to erect new buildings upon the ruins which were scattered over the country, they were not hindered by lack of material: sculpture was a lost art; consequently they employed in the construction of new buildings, all the old fragments which they could collect. Columns and capitals of different diameters and different heights, good and bad together, were used in the same building. Not even the ancient basilicas of Rome could show such a reunion of antique fragments. This diversity of ornamentation, imposed by necessity, accustomed their eyes to see capitals very different in composition, style, age and origin united in the same building. When the supply of these antique fragments was exhausted, it became necessary to supply the demand with new-made works; and the sculptors from the sixth to the ninth century sought to copy the remains of the Roman designs which they had before them. These imitations, made by unskilled hands, with clumsy tools, and without any conception of fitness, were only ill-formed counterfeits of their classical prototypes. At the same time it should be remembered that from this epoch originated a veritable revolution in the manner of employing capitals, for this member of the column was now employed with more regard for its true function than had been evinced by either the Greeks or the Romans. To make clear the importance of this change of function it is necessary to trace certain intermediate steps. The Greek orders are made up of the column with its capital supporting an entablature, or in other words, a lintel construction comprising the architrave, the frieze and the cornice. The same is true of the Roman orders. Before the last years of the declining Roman empire there were no columns either Greek or Roman without entablatures; and it is only much later, in the buildings of the decadence, and only there in rare instances, that the Roman archivolt is placed on the

capital without an intervening entablature. In the Greek and Roman orders, the capital is more a stopping-place intended to satisfy the eye, than a necessary element in the stability of the building, for the architrave does not overhang the shaft, and the capital is (from the point of view of stability) a useless member of which the projections on two sides support nothing. In the Temple of Agrigentum, for instance, the face of the architrave and the face of the shaft at the top are in the same vertical plane, while the capital projects beyond this plane. If the projecting portion were cut away the architrave would still rest as firmly on the shaft. The Athenians, with their usual discrimination, were evidently struck with this defect, for in the construction of the Parthenon they made the architrave project beyond the face of the column. The function of the capital is there well marked; it is a corbelling placed upon the cylindrical shaft of the column to give a larger bearing to the architrave. These refinements escaped the Romans; they only saw in the capital an ornamental feature and did not appreciate the advantage of using the spreading bell to carry an architrave wider than the upper diameter of the column.

With the beginning of the Middle Ages the entablature disappeared entirely, not to return until the sixteenth century, and the capital with its abacus carried an archivolt without any intermediate member. By the addition of corbels the transition was made from the cylindrical necking to a square abacus which received the springing of the arch; thus the capital assumed a useful function. It was employed in this way until the time of the Renaissance, when the classic forms were revived and modified.

The useful or constructive capital of the Romanesque period was followed by the Gothic capital which also served a truly constructive purpose; but its form was almost infinitely varied, and its purpose frequently disguised, if not entirely lost sight of.

XXV. TO XXXII.

PILASTER CAPITALS FROM THE CHURCH OF  
S. SPIRITO, FLORENCE.



XXVIII.

Pilaster Capital, Church of San Spirito, Florence.

# The Brochure Series

## of Architectural Illustration.

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The charter applied for by the T Square Club, the leading architectural organization of Pennsylvania, and one of the foremost in the country, has just been granted in the courts of Philadelphia; and the club is therefore duly incorporated under the laws of the State of Pennsylvania.

Although but now entering upon its corporate existence, this Club has been an energetic organization and a moving factor in the field of its profession for the past fourteen years, having been organized in 1883. The following well known architects were the founders: Walter Cope, John Stewardson, Wilson Eyre, Jr., R. G. Kennedy, Lindley Johnson, Arthur Truscott, George Paxson, Charles L. Hillman, Clement Remington, Frank Price, Louis C. Baker and Mr. Carlton.

The purposes of the club as set forth in the charter and in its constitution are: "To promote the study and practice of architecture and the kindred arts, to afford its members opportunities for friendly competition in design, and to further the appreciation of architecture by the public."

The subscribers to this charter, who constitute the present officers of the club, all of whom are well known Philadelphia architects or draughtsmen, are: David Knickerbacker Boyd, President; Edgar V. Seeler, Vice-President; George B. Page, Secretary; Horace H. Burrell, Treasurer; Walter Cope, Louis C. Hickman, and Charles Z. Klauder, Executive Committee; Adin B. Lacey, Percy Ash and Charles E. Oelschlager, House Committee.

The T Square Club has made its influence felt in various municipal and

national affairs; has passed important resolutions on progressive local and other matters, and last fall conducted the Architectural Exhibition in connection with the regular exhibition of painting and sculpture at the Pennsylvania Academy of the Fine Arts. This exhibition was one of the most successful ever held there or elsewhere, being the first in America to contain so many thoroughly representative contributions from foreign architects.

This fall the club will again hold an Architectural Exhibition, which it is intended shall surpass any previous one, both in the number and the interest of the exhibits. Representatives of the club are now in England and France securing the best drawings; and a number of exhibits are promised from other countries.

The club has also sent Mr. Albert Kelsey to represent it at the International Congress of Architects to be held in Brussels, Belgium, in the latter part of this August.

The Travelling Scholarship in Architecture awarded by the University of Pennsylvania has for several years past been won in every case by a member of the T Square Club. This club in 1889 was awarded the Hinkle gold medal for the best club display at the national exhibit of architectural drawings and sketches at Cincinnati, and in 1895 was also awarded the medal given by the St. Louis Architectural Club for the best club exhibit.

The T Square Club with the University of Pennsylvania, the Pennsylvania Academy of the Fine Arts, the Fine Arts League, the American Institute of Architects and other leading organizations co-operate in all movements for the advancement of art and art matters, whether of local or national interests or benefit.

The Club meets once a month, and at each meeting has interesting competitions among its members upon architectural and decorative subjects. At various times lectures are given which are open to all members of the profession; and the season is occasionally marked by social entertainments. The club consists of one hundred and fifty members, and numbers among its workers all the leading architects of



XXIX.

Pilaster Capital, Church of San Spirito, Florence.

Philadelphia. These men, by their lectures and criticisms at the meetings, give an invaluable assistance to the draughtsmen and younger members, who unite with them in an *esprit de corps* so essential to the advancement of this or any other profession or high object.

The club having recently removed from the School of Industrial Arts Building, is contemplating the occupation of a building in the central part of Philadelphia, which it proposes to fit up for its own uses. Here it will still further increase its usefulness and continue to widen its scope of influence. An idea of its energetic policy may be obtained from the following extract from the introduction to this year's book of programmes for the competitions:—

"Our membership is large. The scope of our work and influence is extending. We have reached a position which carries with it a responsibility to the community.

A high standard of design and criticism among ourselves and an enthusiastic participation in the monthly competitions will be not only of direct benefit to the individual members, but will enable us to take an aggressive attitude as an organization in the struggle against bad architecture."

## David A. Gregg.

There is no more familiar name to American architects and draughtsmen than that of D. A. Gregg; but few of those who know his name and work, know anything of him personally. This is partly due to the nature of the man himself, the kind of nature familiar to us all; an earnest worker, quiet and retiring and completely absorbed in the work to which he has devoted his life. Although known to the profession only as one who presents the designs of others in attractive form, he is, unlike the majority of those who give their attention to making architectural perspectives, a trained architect, capable of conceiving and carrying out the design which he renders. It is from choice, after years of experience in the

general details of architectural practice, that he is now confining himself to this one branch of the work.

He was born in Vermont, the son of a Methodist minister, and received his



David A. Gregg.

early instruction at the Fort Edward Institute and the Plattsburgh Academy in New York State. Like so many others who have made a mark in after life, he very early showed a taste for the work in which he has since distinguished himself. The incidents of his early youth recall Vasari's account of the boyhood of Jacopo Sansovino, the builder of the Library of St. Marks in Venice, and one of the most illustrious architects and sculptors of the Italian Renaissance: "In his first years the boy was sent, as is usual, to acquire the rudiments of learning, wherein he displayed much intelligence. He soon began to study drawing of himself and gave evidence, in a certain sort, that nature had disposed him to the study of design rather than that of letters, since he went very reluctantly to school and was most unwilling to undertake the difficult acquirement of grammar."

When a boy only eleven or twelve years old young Gregg made architect-



XXX.

Pilaster Capital, Church of San Spirito, Florence.

ural drawings, first of the houses in which he had lived, and a little later, a series of six drawings of the church steeples of the town; and without instruction he laboriously copied, line for line, the plates in an elaborate book on perspective, taking all the evenings of one winter for the task—as task it must have been. While at school he constantly employed his leisure in sketching in pencil and ink-wash; and the crowning event of his boyhood was the purchase of a box of water colors for \$17.00, for which he sent to New York.

Soon after this, upon leaving school, he was unexpectedly able to go to New York where he entered the office of the late S. D. Hatch, a friend of his father, and obtained his first practical experience in architecture. Always alive to the importance of pushing forward his studies, he employed his time outside office hours in reading and drawing, attending the evening classes of the Cooper Institute, where he drew the “orders.” At this time he read and was much impressed with Ruskin’s architectural teachings in the “Seven Lamps” and the “Stones of Venice.” After leaving Mr. Hatch he secured a place in the office of the late Henry Fernbach, in whose employ he remained for several years.

Having now spent a number of years in New York as student and draughtsman, the desire for greater opportunities for improvement led to a trip abroad, where Mr. Gregg remained for two years, employed in the offices of several London architects, devoting his leisure to study.

He at first obtained a place in the London office of Messrs. Bell & Roper in the Temple Grounds, in the very rooms once occupied by Oliver Goldsmith. Here, under Mr. Roper, he had unusual scope, as the designing and detailing to scale was done in this office, and all the remaining work carried out in Manchester, where this firm had a second office. The working hours were from ten until five, and the office was closed entirely on Saturdays. This was a remarkable opportunity, and Mr. Gregg improved it to the utmost, spending his time in study and in sketching-

trips to the towns outside London, and in the South Kensington Museum. He attended the evening classes at Heatherly’s famous school, drawing from the cast; and the Royal Academy Architectural School, which was then in charge of Mr. R. Phene Spiers, successively under the instruction in design of R. Norman Shaw, G. E. Street and J. L. Pearson. After six months of this work he successfully passed the examinations and was admitted as a “student” of the Royal Academy. While living in London he occupied chambers in Bloombury Square, in the house once used by Disraeli. During this period Mr. Gregg visited Paris, at the time of the Exposition of 1878.

“Much of my work in London had come to be perspective drawing and attempts at pen rendering, which I greatly enjoyed,” says Mr. Gregg; “and I began to wish for a position where I might do it largely. I corresponded with the editors of the *American Architect*; and in 1879 came to Boston and began work for the paper, continuing with them with much interest and pleasure for fifteen years.” This connection has now been severed and for the past two years Mr. Gregg has been continuing his work independently. In 1887 he was requested by the Massachusetts Institute of Technology to take charge of a class in “Pen and Ink Rendering” in the Architectural Department, and he has since occupied a place as one of the corps of instructors.

Any attempt to describe Mr. Gregg’s work, or even to illustrate it with examples, would seem unnecessary, for it is thoroughly familiar through many recent exhibitions of architectural drawings and the plates of the architectural papers. Probably no single individual in this country has made the drawings of so many important buildings. His work has the great advantage of being attractive to both the architect and the layman; and is always well thought out, simple, direct and expressive. No one has had so great an influence upon the manner of expression adopted by American architectural draughtsmen as Mr. Gregg. His imitators are without number: this in itself is sufficient evidence of the value of his work.



XXXI.

Pilaster Capital, Church of San Spirito, Florence.

## Notes.

We learned the other day of one of those fortunate chances that sometimes occur in business as elsewhere. It concerns the choice of stone for the large polished columns with bronze Corinthian capitals, which support the dome of the new library building of Columbia University. This building, it will be remembered, forms the central feature in the group of new buildings of the University on Morningside Heights. A representative of a company owning four hundred acres of undeveloped quarry lands in the side of Ascutney mountain, near Windsor, Vt., whose product is a so-called granite (though, in fact, it is a syenite, or more nearly that than granite, and should be classed commercially with the high-grade ornamental marbles,) was about to return from a fruitless trip to New York in the company's interest, when he made "one more call," with not much hope of success, at the office of McKim, Mead & White. It so happened that the day before a "very blue meeting" had been held in their office by Mr. Low, who is one of the donors of the library building, the architects themselves and the contractor, Mr. O. W. Norcross. To suit the scheme of color of the interior of the dome-capped reading room of the library, a dark green and white-flecked marble had been determined on, from Connemara, on the west coast of Ireland. Two hundred tons of stone were needed for the library's polished columns, between twenty-seven and twenty-eight feet high and about four feet thick. At this consultation meeting it was announced that fifteen tons had been quarried, when the supply gave out; and now just when, as Mr. McKim afterward expressed it, they knew not where in the world to turn for a suitable stone to replace the Irish marble, a sample of the right thing was brought them from Vermont—a large deposit lying almost at their doors. An order was placed at once and last winter was spent in getting out the columns and opening the quarries for general business. In reply to a letter asking the architects for their opinion of this

stone for architectural uses, now that the columns are in place, the following answer was received at the office of the granite company's treasurer in Boston:—

NEW YORK, June 11, 1897.

WINDSOR GREEN GRANITE CO.,  
50 Bromfield St., Boston, Mass.

*Dear Sirs:* The use of the green Mount Ascutney granite in the sixteen columns of the interior of the reading room of the new University Library of Columbia, has more than fulfilled our expectations.

The formation of the granite, its crystallization—full of light—and especially its varying tones, from deep bronze-green to paler hues of bluish and grayish cast, and great beauty, adapt it for use in monumental work and buildings of public character.

We congratulate you upon the possession of a stone for which there has long been a demand and the great usefulness of which in the future cannot be doubted.

Very truly yours,

McKIM, MEAD & WHITE.

In 1882 the acid chambers of the Bowker Fertilizer Company at Elizabethport, N.J., were roofed with Warren's Natural Asphalt Roofing, and in spite of the fumes and gases from the sulphuric acid used beneath it and the ordinary atmospheric wear on top, this roofing has remained in good condition and is soft and pliable. It is such tests as this that have given the Warren Chemical & Manufacturing Company the inside track on roofing large factory buildings, and as they contract to lay roofs in all parts of the country, no architect should neglect to consult them on any important roofing question.

The forthcoming monograph devoted to the Municipal Buildings of the City of Boston, designed and built under the direction of Mr. Edmund M. Wheelwright, will be notable as the first American example of a class of books which has long been considered as one of the necessities in an architect's working library. It will treat the subject exhaustively from all points of view. Mr. Wheelwright's buildings are already widely known to the profession from published sketches, but working drawings and technical descriptions are required for a thorough understanding of their value.



XXXII.

Pilaster Capital, Church of San Spirito, Florence.





XXXIII.

House of the Tragic Poet, Pompeii.

# THE BROCHURE SERIES

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### THE RUINS OF POMPEII.

ACCORDING to Roman legend the city of Pompeii was built by Hercules, and was so called because the hero there exhibited a long procession (*pompa*) of the captives he had taken in Spain. Although probably of Grecian origin, nothing certain is known of its early history. It underwent various reverses during the Punic and Social wars of the Romans; and must have been continually in danger from the volcanic disturbances of Vesuvius, although for a long time free from actual damage from this source.

It was situated on the shore of the Bay of Naples about thirteen miles southeast of the present city of Naples; and like Herculaneum, which was destroyed at the same time with it, is on the slope of Vesuvius. In the month of February, A.D. 63, an eruption occurred accompanied by earthquakes, which caused much damage, but as the city was almost entirely built of brick and stucco, this was at once repaired. On the night of August 29, A.D. 79, however, came the eruption which finally buried the city to a depth of from fifteen to twenty feet with a covering of cinders, mud and pumice. This eruption was peculiar in several respects. While Herculaneum, further up the mountain side, was overwhelmed with a flood of molten lava, which has made it difficult to excavate and study, Pompeii was buried to a greater depth and more completely, by a mass of loose material which has been comparatively easy to remove. One singular

thing is to be noticed, namely, that the cloud of mud and ashes which descended upon Pompeii seems to have selected this unfortunate city, as it were, as a special victim; for it confined itself almost entirely to the city itself and extended only a short distance into the adjoining fields. It accomplished its work of destruction so quickly and with so little warning that many of the inhabitants were unable to escape; and most of the buildings with their contents were left exactly as they had been used immediately before the terrible catastrophe—the most valuable treasures in many cases untouched. So thoroughly was the city covered that, although known from the contemporary accounts of the Romans, it has been completely lost until about a century ago. It has therefore escaped the despoiling and rebuilding from which all other Roman cities of its time have suffered, and furnishes the most complete record which has come down to our time of the life of Imperial Rome.

Pompeii was essentially a country resort for the wealthy Romans, and in its arrangement was a miniature Rome, having a forum surrounded by temples and public buildings, and all the other features of its original reduced to a smaller scale. Its baths, theatres and circus were like those of other Roman cities, the latter situated at a distance from the forum. The streets were narrow and, like those of modern times, lined with buildings standing wall to wall with no intervening space. The polytheistic religion of this period de-



XXXIV.

House of Cornelius Rufus, Pompeii.

manded many temples dedicated to Roman, Greek and Egyptian gods, besides numerous altars and public places of worship. The houses are upon a small scale; generally of one, but sometimes of two stories.

The houses of Pompeii varied in size and arrangement, but followed one general scheme, resembling in their main features the plans of Vitruvius and the descriptions given by classical writers, such as Pliny. The entrance was through a narrow passage or vestibulum, into a hall or atrium, sometimes with (but more frequently without) columns; from this opened several bed-chambers for the porter and for country visitors. At the extremity, if the house was large, were small chambers for the ladies of the household; and in the centre of the tessellated pavement was a shallow reservoir for rainwater admitted through an opening in the roof, which was covered with an awning when desired. Near this reservoir or impluvium, which had a peculiar sanctity in the eyes of the ancients, were sometimes placed the images of the household gods, or Penates. The hearth, often referred to by the Roman poets, and consecrated to the Lares, was, in Pompeii, almost always formed by a movable brazier. In some corner, often the most ostentatious place in the room, was deposited a huge wooden treasure chest, secured by strong hooks to a stone pedestal, and strengthened with iron or bronze bands and locks.

Beyond the atrium was the tablinum, in which the pavement was usually adorned with rich mosaics and the walls covered with elaborate paintings. This was the inner reception room, and from it opened the triclinium, or dining-room, and several smaller apartments. These rooms all opened on the peristyle or court, with its piscina or impluvium in the centre—an open area surrounded with a colonnade, and covered from the rain or sun by a movable awning. It was adorned with flowers, vases and statuary, and was the centre of that portion of the house devoted to the master and his family.

At the end of the peristyle was the kitchen and possibly a garden with a second court surrounded with columns,

a picture gallery, another dining-room and various chambers.

At Pompeii, a second or third story was rarely of importance, being built only above a small part of the house, and containing rooms for slaves; differing in this respect from the more magnificent edifices of Rome, which generally contained the principal eating-room on the second floor. The apartments were ordinarily of small size; for in those delightful climes they received any extraordinary number of visitors in the peristyle, the hall, or the garden; and even their banquet rooms, however elaborately adorned and carefully selected in point of aspect, were of diminutive proportions, for they were rarely required to accommodate a company of more than nine or ten.

The view of the interior as seen from the entrance must have been very effective and imposing:—the richly paved and painted atrium opening into the graceful peristyle with its basin and fountain, and adorned with flowers, from which opened the banquet-room and garden—everywhere a wealth of decoration in both form and color.

The front of each house opening upon the street was almost invariably occupied by shops, even in those of the better class, while the portion devoted to the owner was in the rear with one or more courts and gardens.

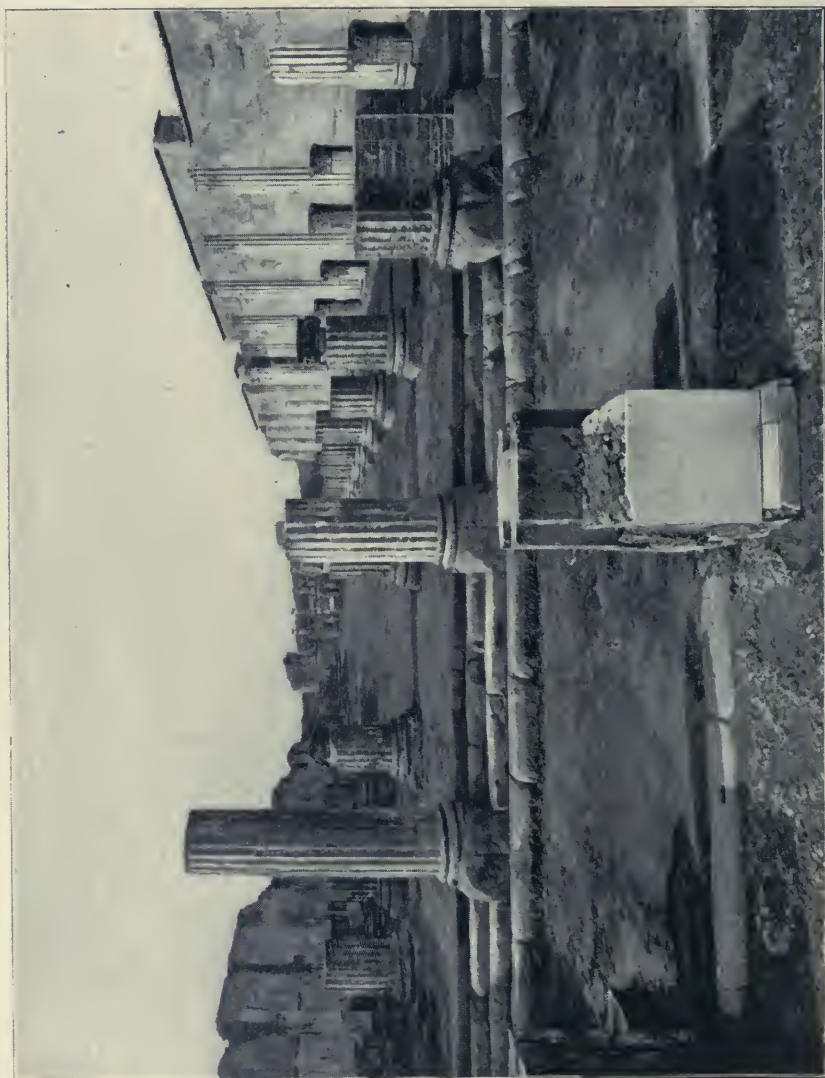
Bulwer has given in “*The Last Days of Pompeii*” a description of the houses of the city which is graphic and complete. He appropriated for the dwelling of his hero, Glaucus, the House of the Tragic Poet, and his description can be taken as typical of the usual arrangement of Pompeian dwellings. It is given in condensed form below.

## XXXIII.

## HOUSE OF THE TRAGIC POET, POMPEII.

This house was at once one of the smallest and yet one of the most adorned and finished of all the private mansions of Pompeii; it would be a model at this day for the house of “a single man in Mayfair,” the envy and despair of the cælibian purchasers of buhl and marquetry.

You enter by a long and narrow vestibule, on the floor of which is the



XXXV.

The Basilica, Pompeii.

image of a dog in mosaic, with the well-known "Cave canem." On either side is a chamber of some size; for the interior part of the house not being large enough to contain the two great divisions of private and public apartments, these two rooms were set apart for the reception of visitors who neither by rank nor familiarity were entitled to admission to the penetralia of the mansion. Advancing up the vestibule you enter an atrium rich with wall paintings. On one side a small staircase admitted to the apartments for the slaves on the second floor, and one or two small sleeping rooms with painted walls.

You now enter the tablinum, across which at either end hung rich draperies of Tyrian purple, and was shut off at pleasure from the adjoining rooms by sliding doors. On the walls was depicted a poet reading his verses to his friends; and in the pavement was inserted a small and most exquisite mosaic, typical of the instructions given by the director of the stage to his comedians.

You pass through this saloon and enter the peristyle; and here (as was usually the case with the smaller houses) the mansion ended. From each of the seven columns which adorned this court hung festoons of garlands; the centre, supplying the place of a garden, bloomed with the rarest flowers placed in vases of white marble, that were supported on pedestals. At the left hand of this small garden was a diminutive fane, resembling one of those small chapels placed at the side of the roads in Catholic countries, and dedicated to the Penates; before it stood a bronzed tripod: to the left of the colonnade were two small cubicles or bedrooms; to the right was the triclinium or dining room which has been named by the antiquaries of Naples "The Chamber of Leda" from the subject of the paintings upon its walls. Round the table of citrean wood, highly polished and delicately wrought with silver arabesques, were placed the three couches which were yet more common in Pompeii than the semi-circular seat that had grown into fashion at Rome; and on these couches of bronze, studded

with richer metals, were laid thick quiltings covered with elaborate broidery, and yielding luxuriously to the pressure.

## XXXIV.

## HOUSE OF CORNELIUS RUFUS, POMPEII.

The house of Cornelius Rufus is noteworthy for the remains of its handsome atrium, with a bordered impluvium or basin, shown in the illustration, beside which still stand the marble supports of a table, gracefully carved with lions, that have often been imitated by modern designers. The plan is similar to that of most other houses in the city. Beyond the atrium is seen the peristyle with its eighteen Doric columns. The house derives its name from a statue inscribed with the name of Cornelius Rufus.

## XXXV., XXXVI. AND XXXVII.

## THE BASILICA, POMPEII.

The Basilica faces on the southwest angle of the Forum and in plan is approximately a rectangle of 83 by 220 feet, surrounded on all four sides by interior ranges of columns, and having at the western end a rectangular tribune projecting inward from the back wall. It opened on the portico of the Forum by five doorways separated by piers and probably closed by wooden barriers and light gratings. Within these doorways was a narrow vestibule, separated from the main body of the interior by a flight of five steps, two piers, and two central columns. The central space was surrounded by twelve large columns on each side, with two intervening at each end. These columns were very solidly built of specially shaped bricks, and coated with a fine-grained hard stucco. From the size of these columns it is clear that there can have been no second range above them. To the central columns, corresponded engaged columns against the walls, which, as well as the columns of the vestibule and those in the line of the front of the tribune, are of much smaller size, indicating that there was here a superposed order. Many fragments in tufa, of this order, have been found with Ionic capitals. They show



XXXVI.  
The Basilica, Pompeii.

that the upper story consisted in great part of colonnades, left open for the lighting of the building. There is indication that there were no floored galleries over the aisles. The tribune was raised about six feet, and was closed on the sides with walls, and open in front, supported by six columns whose intercolumniations show marks of gratings. Beneath it there is a vaulted chamber of problematical use: it does not appear to have been a prison. It was richly decorated with moulded stucco. The building was roofed with timber. The wall decorations were imitations of colored marbles. In date it probably belongs to the second century B.C. It was damaged by the earthquake of 63 A.D., and was undergoing restorations, including the decoration of the tribune with marble, when the great eruption came.

XXXVIII. AND XXXIX.

HOUSE OF MELEAGER, POMPEII.

This is also known as the House of the Nereids. It was excavated in 1830 and 1831, and stands near the city wall. Like the others selected for illustration, it is not one of the largest, but is, like them among the handsomest and most charming Pompeian houses. The front was covered with plain white stucco imitating stone, and resting on a plinth, colored to resemble gray marble. It has no shops in front; and the plan differs from most Pompeian houses in one other important particular. The vestibule and atrium are arranged as usual; but the peristyle, instead of being placed behind the latter, is at one side—the left upon entering. The two plates show this peristyle from two points of view, the first looking towards the rear where there was a central feature or rectangular apse probably used as an open summer dining-room. This was apparently divided into two stories supported by columns, and was flanked by exedrae, one on each side. At the left hand corner in a projecting ell was a closed dining-room, beside which was the spacious bedroom of the master of the house. The second plate shows a view from the opposite direction, towards the front wall of the house.

This is one of the largest and most magnificent apartments yet found in Pompeii. It has twenty-four columns built of brick and small stones and coated with stucco. The lower portions of the columns have, as usual, the flutes filled with a bead, and are painted red; the upper portion was white. The square opening in the pavement shown in plate XXXIX. was a reservoir to receive rainwater from the roofs, conducted by the gutter surrounding the peristyle. The impluvium in the centre was faced with white marble and lined with stucco painted blue. It was kept filled with water supplied through the fountain in the centre, and a bronze cock at the top of the flight of steps, thus forming a miniature cascade. The atrium is in the Tuscan style, without columns; and the rooms opening from it are fewer and simpler in plan than is usual. The large earthen jar shown in the illustrations, contained lime, when found, and has led, together with other evidence, to the conclusion that the house was being repaired at the time of its destruction. The decoration is everywhere very rich. The mosaic floors are of *opus signinum* with inlaid patterns. The wall painting, in the late Roman styles, is lavish. Throughout the building there is frequent repetition of decorative motives derived from the sea, such as nereids, dolphins and sea-monsters. This suggested one of the names by which the house has been known.

XL.

HOUSE OF THE CACCIA, POMPEII.

This view gives a slight indication of the painted wall decorations which are so familiar to all students of classic art. The other features already described,—the impluvium, mosaic pavement, and view of the peristyle,—give a suggestion of the charming way in which the rooms of these houses opened, one into another, giving vistas and groupings which illustrate the charm of formal planning. These houses follow an accepted scheme of planning; but this is infinitely varied according to individual needs and conditions, and combines many of the advantages of both formal and picturesque treatment.



XXXVII.  
The Basilica, Pompeii.

# The Brochure Series

## of Architectural Illustration.

PUBLISHED MONTHLY BY

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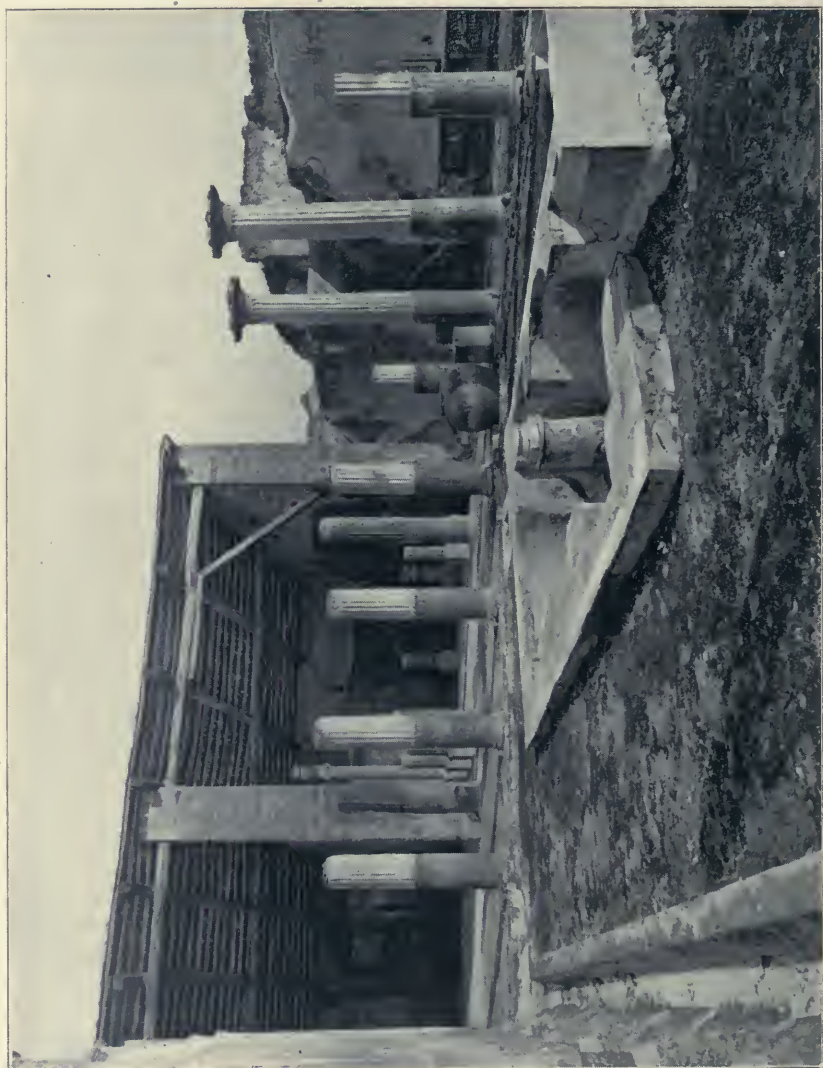
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There is little doubt in the minds of thoughtful students that one of the main reasons for the interesting and satisfactory effect of all good architecture upon the observer is due to the intimate relation which has existed between the architect and the building. As this relation becomes closer, the charm and fascination of the building becomes greater. The complexity of modern building operations tends to make the architect of today an executive rather than a designer and craftsman, and thus prevents the close connection between him and his building, destroying the personal quality in his work. This condition is frequently deplored; and many remedies have been suggested which, if adopted, would result in improvement. It is a perennial question for discussion among architects. In the November number of the *BROCHURE SERIES* extracts were given from a paper bearing upon this subject, read in England by Mr. T. G. Jackson. The discussion of the paper by others present when it was read, brought out a number of points not mentioned by Mr. Jackson.

Mr. Owen Fleming said that he had listened with very great pleasure to a most thoughtful investigation of the problems that faced modern architects who were anxious to put into their work the same spirit that we found and admired in ancient work and that we missed and deplored, speaking of it as a whole, in modern work. We realize the very great difficulties that lay in the way of any return to the almost idyllic picture of mediæval times which Mr. Jackson had sketched out. He (the speaker) knew of one old student of the

Association, Mr. Detmar Blow, who had given up some excellent opportunities of becoming a good paper architect, and had articulated himself to a firm of masons and had worked on actual building. He believed that Mr. Blow was of opinion that his future work would certainly be better for the experience thus gained. There were a few other architects, though they could be counted on the fingers of one hand, who had been self-sacrificing enough to take a similar course. Having regard to modern conditions—to the intricacies of planning referred to by Mr. Jackson, and to a matter to which Mr. Jackson had not referred, but which had always been a great difficulty with him (the speaker), viz., the problem of getting an estimate before one began to build (which seemed to him to be impossible under any system of building without careful drawings)—with these difficulties before one he did not think we could hope to return to the ways of the past. But he thought there were things we could and should do, and it would be interesting to consider what the Association had done and could do. Among the visitors to their studio their older friends were now reinforced by men like Mr. Jackson, Mr. Prior, Mr. Lethaby, Mr. Ricardo, Mr. Voysey, and others—in fact, nearly all those who were earnestly desirous of carrying forward a practical scheme of education. Last year at the School of Design and Handicraft they began a new system, and, instead of trying in a scrappy way to sketch out building after building month after month, they resolved to take one building and work it out thoroughly, dealing with each material separately. The system was fairly successful, and this year it had been developed, and when the work of that school came to be exhibited, as it would be within the next two or three months, his hearers would feel encouraged at the result, and would begin to think that the right course was being pursued. This year they had deliberately put on one side the reproduction of past forms. What was aimed at was to study the material—to get at the real thing and the possibilities of the material with which they



XXXVIII.  
House of Melesager, Pompeii.

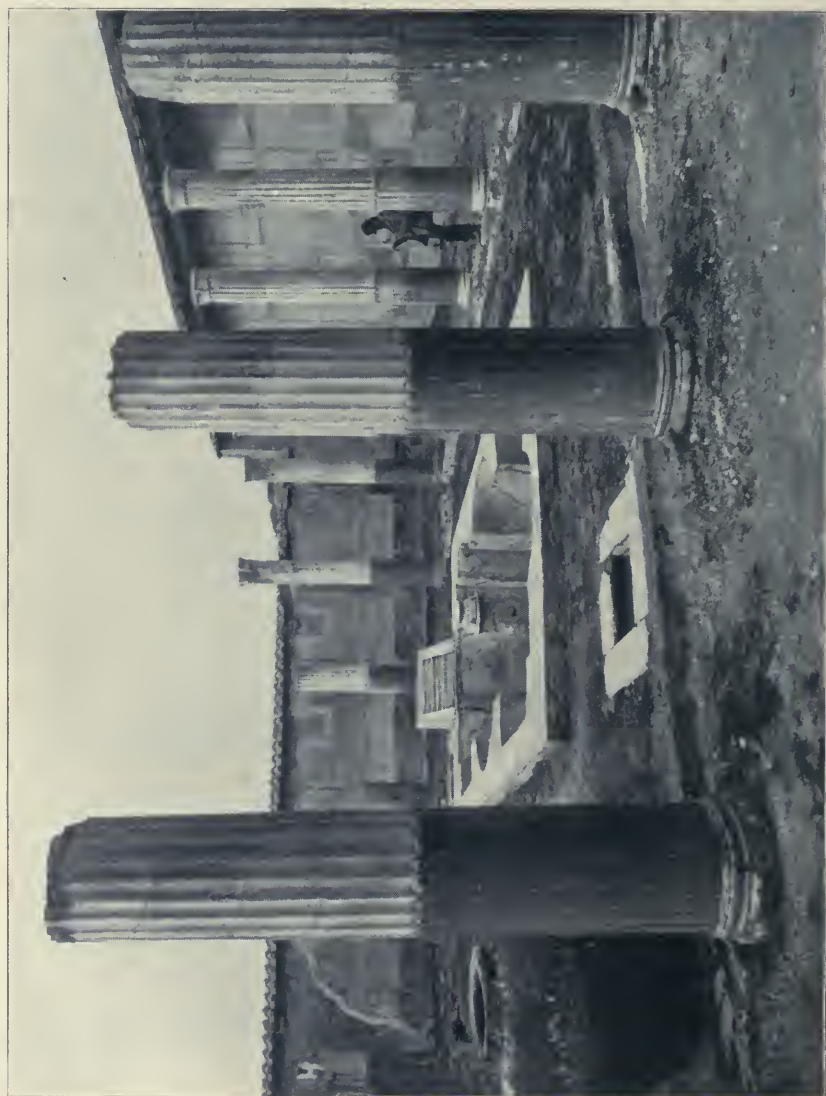
had to deal. When this was satisfactorily done, then their drawings would be simply diagrams illustrating as far as was necessary how certain materials ought to be treated. They had been working, owing to the kindness of Mr. Lethaby, at the new School of Arts and Crafts, which was going to do a very great deal towards the improvement of artistic handicraft. They had been working in stone and lead, and some of the recent results were thoroughly satisfactory. He thought that the Association had arrived at a critical period of its existence, and he feared that there would be a struggle between those who believed in the academic method of treating architecture and those who believed in the practical. He did not object to examination as examination. He had spent years in preparing for the Institute Examination himself, but though he did not know it then, he now thought that those years had not been used to the best advantage. But, for all that, he did not wish to evade the Examination; as they had to pass it, let them get through and be done with the matter, and then turn their attention to real architecture and building. Mr. Lethaby had recently told him that they had practically only to ask the Technical Board and good workshops would be placed at their disposal, and he (the speaker) hoped that some possible system would be adopted by means of which those workshops could be incorporated in the Association's new premises. It did seem to him to be essential that the workshops should be on the premises, so that when they entered their premises they would have oral demonstration that real handiwork was being carried on. Architectural students would then feel as engineering students do, viz., that they were part of a living, working profession.

Mr. H. W. Pratt said he had been more and more led to believe that an architect's education was not sufficient unless he had a very considerable knowledge of almost every handicraft with which he would have anything to do; and although Mr. Jackson would like architects to know as much as possible of those trades, yet he supposed that Mr. Jackson meant that every architect should be specially taught some handi-

craft, and he, no doubt, would agree that a proper knowledge of one handicraft would be better than a smattering of many. There was, no doubt, a tendency, and technical schools seemed to have exhibited it, in the direction of the acquisition of a smattering of handicraft work, which led to the students going about their work in an amateurish sort of way. He would be very sorry indeed if technical education on these lines should be taken up by architects. He thought that if an architect in his student days took up masonry, or carpentry, and confined himself to one or the other, he would fulfil all the conditions that might be reasonably expected of him. Mr. Jackson's ideal was a very high one, but he had brought it down to attainable limits, and he (the speaker) felt sure that they would do their best to forward the movement by combining with the crafts for the development of architecture as a whole.

Mr. C. H. Brodie said that young architects should all try to go as clerks of works for some time upon buildings being erected. If young architects were to do this, and were to see the erection of a building from the excavation to the finish, the result would be very satisfactory; no architect, in fact, was thoroughly competent unless he had had such opportunities. An architect clerk of works, especially one with artistic leanings, would make it his business to go into workshops to see the different parts of a structure made in different materials. In reference to engineers, they as a body knew much more about their work than architects, and that result was obtained because engineers were bound to spend a portion of their time as students on works in progress; and until architects did that he thought they would be as blind men leading the blind. In addition, of course, the young architect might take up some handicraft; but, at least, he should be upon one building during the whole time of its erection.

Mr. Banister F. Fletcher said that he was inclined to think that no evidence had been shown that it was necessary for an architect to work at any trade. Of course, if an architect had anything to design he could go to a workshop and witness the process of carrying out



XXXIX.

House of Melesager, Pompeii.

designs in the material which he desired to use, and if the architect had not sufficient intellectual capacity to observe the particular qualities which the material possessed, he (the speaker) did not think that such knowledge could be gained at the bench. As to Mr. Fleming's reference to the academic *versus* the practical architect, he (the speaker) was always dubious about the practical man. Was Mr. Norman Shaw a practical or an academic architect? He was rather inclined to think of Mr. Shaw as an academic architect, and yet, if they looked at Mr. Shaw's joinery, they would see that although he never worked at the bench, his work had been put together in a masterly way. Could the Paris Opera House have been designed by any one but an academic architect? Suppose that a Paris Opera House had been designed by a "practical" architect, should we feel satisfied with the result? An architect was a man who had to use his head, and when he was able to do that, and could plan buildings properly, he might turn his attention, though it would be late in life, to bench work. Architects were expected to know everything, and the opinion of Vitruvius as to what an architect should know was a moderate one compared with that of modern educationists. Then there was the client's point of view; an architect should take care to remember that. Having got a client, if they were not careful to remember his point of view, they would probably never get another. They could not get rid of the fact that in the nineteenth century an architect was very largely (although Mr. Jackson would not agree with that) a business man. A client expected an architect to be able to protect him, and if architects did not do that they would be neglecting one of the principal duties for which they were employed.

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### Notes.

A very ingenious plan has been adopted by Samuel Cabot of Boston to facilitate the selection of colors for staining shingled houses. Four colored prints of one of Mr. William Ralph Emerson's charming cottages have been bound together so that they are exactly

"in register," as the printers say, one under the other. Each print is cut on the roof-line, so that the top or bottom portion can be folded over and show the print beneath. By this means the roof of one can be shown on the walls of the one below, or *vice versa*, and so on, giving a number of different combinations at will.

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Just as an accurate, well-drawn map or plan has an interest to an appreciative person, aside from what it is meant to represent, so a collection of mathematical instruments, or even an illustrated catalogue of them, has a fascination for one who knows their use. If the interest in mechanical devices and instruments of precision is as widespread as the writer has good reason to believe, and as his own experience indicates, the illustrated catalogues of dealers in such devices will, for a long time to come, be to grown-up men picture-books of the same unflinching interest as the familiar nursery companions of our childhood. For years the catalogue of the Keuffel & Esser Company of New York has been the most complete of this class of American publications and always repays careful study.

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A large proportion of American architects are called upon at some time to design public buildings of one kind or another. Schools, fire and police department buildings, hospitals and public institutions are constantly being required, and unfortunately there is very little available information upon these problems, and almost nothing in systematic shape for reference. Scattered notes and occasional plans have been published, but it is difficult to find them when required, as they often are, at short notice.

The work of Mr. E. M. Wheelwright, former city architect of Boston, included an unusually wide range and large number of public buildings. A description of these, with full illustrations, will be given in the forthcoming monograph of Mr. Wheelwright's public work, to be published by the Bates & Guild Company. An announcement will be found in the advertising pages of this number.



XL.  
House of the Caccia Pompeii.





XLI.

The Arch of Titus, Rome.

# THE BROCHURE SERIES

## OF ARCHITECTURAL ILLUSTRATION.

VOL. III.

JUNE, 1897.

No. 6.

### THE ROMAN TRIUMPHAL ARCHES.

IT is to the early Roman custom of decorating the city gates for the return of victorious generals, that we must look for the origin of the Triumphal Arch. In the days of the Republic, long before the emperors, this means of expressing Roman enthusiasm was discarded as inadequate, and special arches were built over the roads on which the conquerors were to enter. At first these structures were temporary, and of wood or other light material. Not until the pompous days of the emperors did the arches assume the architectural proportions with which we are familiar. In time it seems that the Romans grew fond of this form of monumental architecture, and were not content with confining it to Rome. Examples are to be found scattered through the smaller towns of Italy, in France, in Spain, in Algiers and even in Athens; while Rome herself is said to have been adorned with no less than twenty-one.

The triumphal arch, whether borrowed, as Mr. Fergusson suggests, from the Etruscans, or an outgrowth of Roman customs, is peculiarly Roman in its constructive nature. There is here a strange mixture of splendor and bad taste. The use of columns, for instance, on the faces of these huge blocks of masonry, where they have no function, is obviously a perversion of Greek inheritance. The beauty of the columns themselves, however, makes

us often forget the misuse, or at any rate forgive it. But the use of Greek pediments upon such structures is a corruption unpardonable even in the eyes of ardent admirers of the Romans. Fortunately, by the time of the erection of the elaborate arches, this fault was outgrown.

Since the problem was always the same,—there is but the one requirement, decoration,—the arches are similar in general treatment. The exterior is an elaborate piece of cut stone work, with columns and pilasters, a rich entablature, and so much attic or superstructure as will give a sufficient appearance of weight upon the arch, and complete the design. The mass of the building is usually of rough mortar masonry of the common sort, and in this one or more chambers will be found, where the thickness of the structure is sufficient. The main requirement of the exterior is to present a surface aptly fitted for decoration.

The simplest form of a triumphal arch is a wall with a gateway in it,—where no gate is needed for defense or enclosure,—decorated with architectural details and with sculpture. In the earlier days of the empire a single arch was the usual form; but later two smaller side arches, for the accommodation of foot passengers, were added. These increased the splendor of the monument and gave greater opportunities for ornamentation.



XLII.

The Arch of Drusus, Rome.

## XLI.

## THE ARCH OF TITUS, ROME.

If not the first, certainly one of the earliest examples of the elaborate architectural style in which the triumphal arches were carried out, is the arch of Titus in Rome. Built by the Roman senate and people to commemorate the destruction of Jerusalem in 70 A.D., it was not finished until after the death of Titus in 83, though it was doubtless begun during his life. During the Middle Ages it was made a part of the fortress tower of the Frangipani, and was not isolated until 1822.

In composition it consists of a single opening framed by the composite order, and is said to be the first ever erected in which that order was employed. Whether or not that be true, it is certainly a graceful example of it, and has been treated as a model of its kind. It is built of large blocks of Parian marble, and is simple in outline and in excellent architectural taste. The archway is flanked on both faces by two engaged composite columns on each side which support the entablature. The frieze is sculptured with sacrificial processions. The shafts gradually diminish from the pedestals, and are surmounted by the usual acanthus capitals. They were doubtless originally all alike, though the outer columns have been restored in a manner unworthy of their old companions. The volutes, and in short all parts of the capitals as well as the details of the entablature, are in a style of profuse ornament. The spandrels are filled by two Victories; one holding in her hand a standard, and the other apparently a laurel crown. The brackets under the cornice are formed of dolphins resting upon shells. On the keystone, now much decayed but once deemed the finest in Rome, are relics of a helmeted female figure, probably Rome herself.

The famous reliefs of the "Spoils of the Temple" are to be found on the walls of the interior of the passage. The sculptures are now much worn, but may still be recognized by their beauty and vigor as belonging to the first era of Roman art. The attic which surmounts the whole and bears the inscriptions is overpoweringly high,

and perhaps detracts from the beauty of the general proportions. The absence of sculpture on each side of the arch is also a defect; for the only logical function of these monuments is to present surface for sculptured decoration. Yet, as a whole, the arch of Titus is certainly the most remarkable in Rome for harmony of proportion and beauty of sculpture.

## XLII.

## THE ARCH OF DRUSUS, ROME.

Another example of the single arched type is the Triumphal Arch of Drusus. It was erected by decree of the Senate, early in the Christian era, over the Appian Way, in recognition of the services of Drusus, the father of the Emperor Claudius, in the Rhætian and German Wars.

The structure consists of a single archway of massive Travertine masonry flanked by two composite columns on high pedestals. The opening is low for its width, and the key-block too heavy. The entablature, if one may judge of it by the blocks that still rest upon the columns, is too light for the substructure. The attic is gone, but there still may be detected in the midst of the rough masonry that surmounts the arch, a fragment of the cake mouldings of a pediment.

Caracalla, it is said, made use of the arch to carry the Arno aqueduct over the street; and doubtless the rough stone noted above is of his time.

In mass as well as in the use of the pediment, the arch of Drusus is inferior to the arch of Titus.

## XLIII.

## THE ARCH OF TRAJAN, ANCONA.

The arch of Trajan at Ancona was erected in 112 A.D. to commemorate, it has been conjectured, the completion of Trajan's improvements in the harbor of that town. Whatever the purpose, however, the result commands admiration. This arch, which is in remarkably good preservation, is built of white marble in light and elegant proportions. It has a single opening with a heavy keystone. It is to be noted that the four columns on each face are Corinthian, not composite. The arch



XLIII.

The Arch of Trajan, Ancona.

is attributed to the Greek architect, Apollodore. A high panelled attic above the entablature completes the whole. Dr. Freeman in his book of rambles about Italian towns thus speaks of the arch :—

“Tall, narrow, simple, it stands with a dignity worthy of the prince whose name it bears; a contrast alike to the rudeness of some arches of its kind and to the overdone splendor of others. This arch at Ancona has the great advantage of omitting the worst of the Greek masks with which the Romans faced their own constructions.”

## XLIV.

## THE ARCH OF TRAJAN, BENEVENTUM.

Another arch of the single opening type, also built by Trajan, is the Triumphal Arch at Beneventum. It once spanned the Appian Way, but now serves as one of the gates of the city. It was erected in 114 A.D.,—according to the inscriptions on both sides of the attic,—by the Roman senate and people in honor of Trajan. It is possible, as has been suggested, that the arch was built in commemoration of the prolongation of the Appian Way; but it is more likely that it was in honor of Trajan's victories over the Dacians. The sculpture, at any rate, represents the Dacian wars and the emperor's triumph.

This arch, of white marble, is one of the finest and best preserved of all the ancient triumphal arches. The opening has two fluted Corinthian columns on each side, supporting an elaborate entablature. Above is an attic in three compartments, the central one bearing the inscriptions. Each front is decorated with a frieze and several superimposed bands of sculpture. These sculptures are said not to be excelled by any extant specimens of Roman art. The spandrels of the arch are filled with Victories.

The proportions of this arch are in pleasing contrast to those of the arch of Titus in Rome, where the attic, as has been noted above, is too high.

It is supposed that the Greek Apollodore designed this arch as well as the arch at Ancona.

## XLV.

## THE ARCH OF SEPTIMIUS SEVERUS, ROME.

A fine example of a triumphal arch of the triple-arched type is that of Septimus Severus in the Roman Forum. It was built in 203 A.D. in commemoration of the victories over the Parthians and Arabs, in honor of the emperor and his sons, Caracalla and Geta.

The three archways, of which the central one is the largest, are copped. Composite columns on high pedestals flank the arches. Here the columns are not engaged, but set in front of fluted pilasters of the same order. In the spandrels of the central arch are carved Victories bearing trophies; in those of the side arches are River Gods. Over the side arches are reliefs representing incidents of the campaigns; on the pedestals of the columns are sculptured captive barbarians.

The high attic bears pompous inscriptions, and originally supported a group in bronze of the six horse triumphal car of the laurel crowned emperor.

The substructure of the arch is of Travertine, the columns are of Proconnesian, and the remainder is of Pentelic marble.

While the proportions of the arch of Severus are for the most part good, the attic is over-high, and shows the decadence that is still more marked in the crude sculptures.

## XLVI.

## THE ARCH OF CONSTANTINE, ROME.

Perhaps in general effect the most impressive of Roman triumphal arches is the arch of Constantine, dedicated in 315 A.D. Like the arch of Septimus Severus it has three archways. Each front is ornamented with four Corinthian columns on pedestals, supporting blocks of the entablature, which, with the dies resting on them, form pedestals for statues in Dacian costume. Above the entablature is a high attic, the central compartment of which bears inscriptions; the others are filled with reliefs taken from the monument of Trajan, representing that emperor's triumph over the Orientals and Dacians. Beneath the entablature on each face, over the smaller arches, are four circu-



XLIV.

The Arch of Trajan, Beneventum.

lar medallions, also from that monument, showing scenes from Trajan's life.

Beneath these, a small band, carried round the structure, is sculptured with rude scenes from Constantine's campaigns. In the spandrels of the central arch are Victories crudely carved; while in those of the side arches are nymphs and river deities. On the side walls of the central arch are more reliefs, representing the exploits of Trajan; and on the side arches portraits of the sons of Constantine. On the basement piers are sculptured Victories and barbarian prisoners.

The reliefs of Trajan's time, upon which rest the claims to excellence of this arch, are in the best style of Roman decorative art, and contrast with the rough sculpture of Constantine's decadent age.

XLVII.

THE ARCH OF JANUS QUADRIFRONS, ROME.

A very curious arch of Greek marble is to be found at the extreme of the Boarian Forum. It is called the arch of Janus Quadrifrons, and was built a little later than the arch of Constantine. It is plausibly conjectured that it was erected for the triumphal entry of Constantine after his victories over Maxentius. This arch was used in antiquity as a shelter for the money changers. It is heavy and debased in style, and marks the decadence of the time. The structure is pierced by two passages at right angles, leaving four massive arch piers.

The central space is covered by a groined vault. On each face, arranged in two tiers beside the archway, are twelve niches, of which eight are for figures of divinities, and four blind.

The frieze and cornice are now much damaged and the attic is gone. The structure is perhaps more curious than architecturally interesting.

XLVIII.

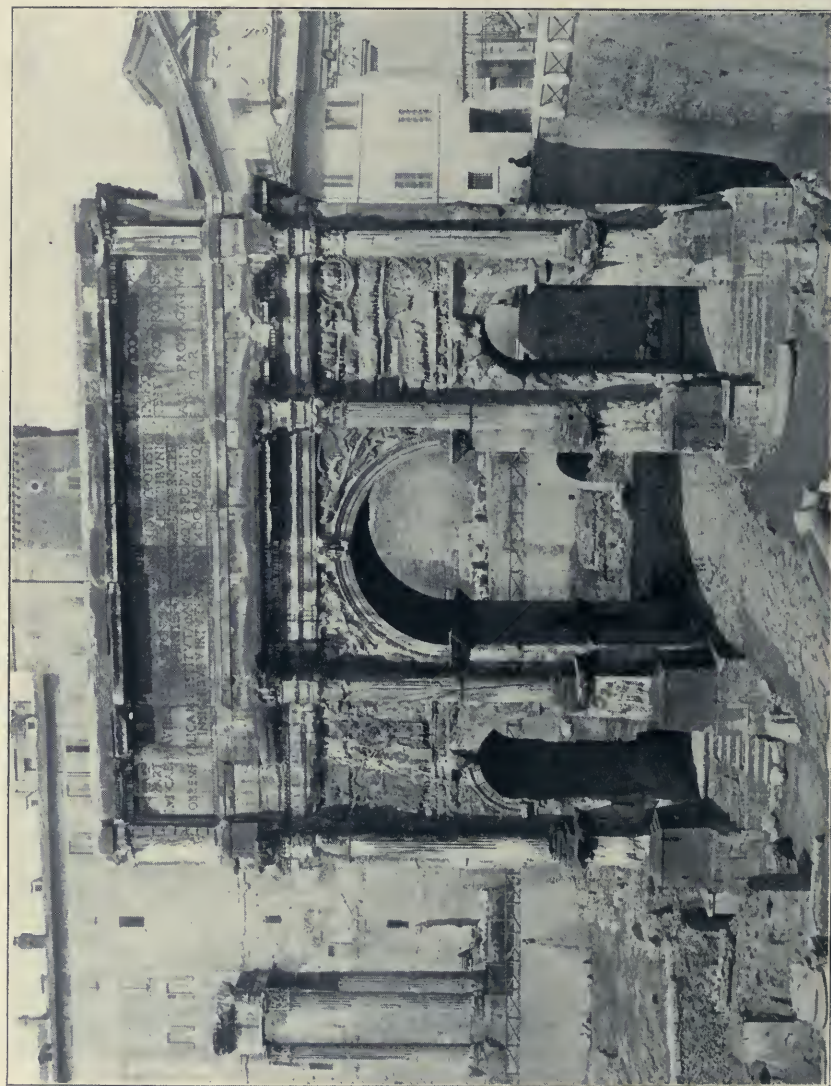
ROMAN ARCH AT RHEIMS, FRANCE.

While probably not triumphal, the great arch at Rheims partakes of the nature of the triumphal arches by its beauty of proportion and dignified splendor. This arch was doubtless, when perfect, more magnificent than any of the arches in Rome. Its great size no doubt lends much to its impres-

siveness. It is composed of three archways, the central one of which is slightly wider than those on the sides. While, unfortunately, this arch has been so much injured by being built into the walls of the city that it is difficult to say what its original form may have been, there still remains in excellent condition enough to make its beauty beyond question. The column, for instance, on the extreme right, and the bit of architrave above it, are remarkably well preserved and full of fine expression. The columns are Corinthian, and are more delicate than most work of their time; for that time, if we may judge from the decadent style of the sculpture, was in the last age of the Roman empire.

The plates in the last two issues of *The Architectural Review* are of particular interest to architects whose practice lies in the direction of public buildings, and to students who are working on academic lines of study. In Number IV. of the current volume, four plates are given to the new Worcester City Hall by Peabody & Stearns. The front elevation and three carefully studied details are shown, two of them being window openings which are most interestingly treated. The drawings themselves offer many suggestions for getting out "three-quarter scale" details.

Number V. contains two elevations of the Hotel Renaissance at the corner of Fifth Ave. and 43d St., New York. Messrs. Howard & Caldwell are the architects of this building, which many consider one of the most noteworthy of recent additions to New York architecture. One of the elevations is reproduced on a double plate, in the same way as Carrère & Hastings' very fine drawing of the Sloane house which the *Review* published about a year ago. Another plate is devoted to a group of interesting pencil studies for the building. The new Minnesota State Capitol by Cass Gilbert is also well represented in this number by reproductions of working drawings. In both numbers will be found Mr. Goodhue's pen drawings, which are referred to at some length on page 95.



XLV.

The Arch of Septimius Severus, Rome.

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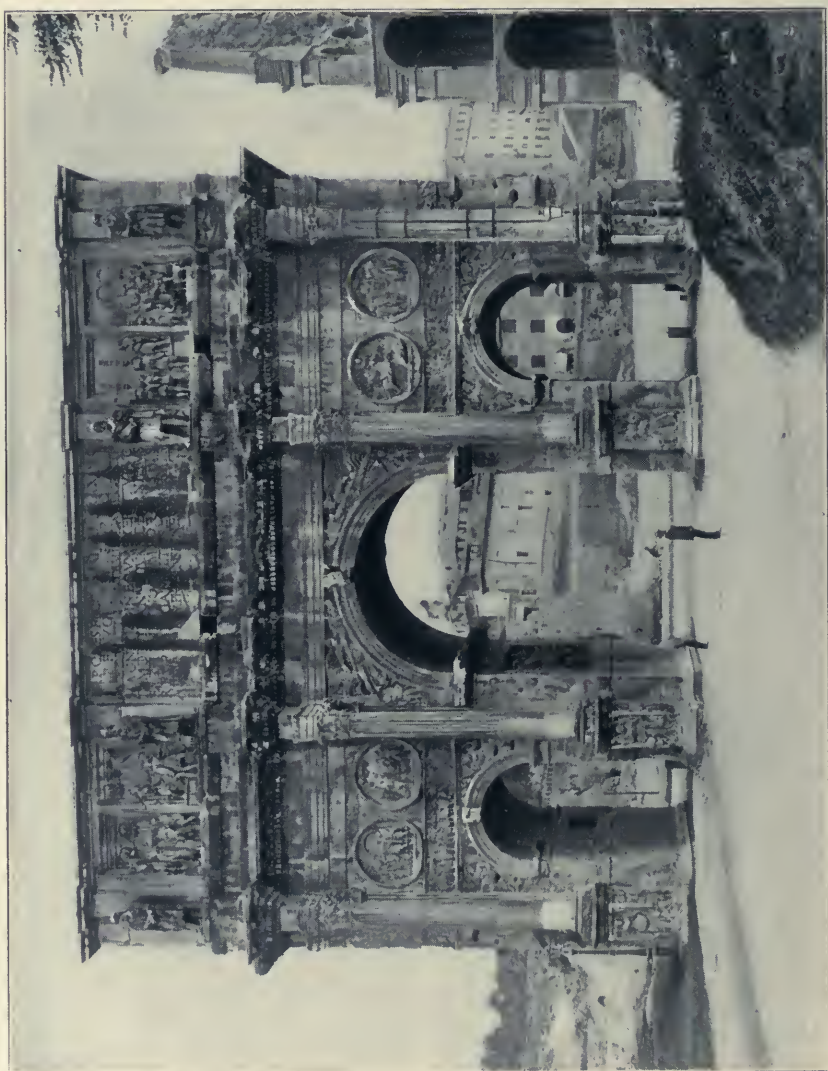
Architects, like other specialists in the field of art, are prone to look upon suggestions and criticisms from the "outside fools" as of little value, and often carry their pet prejudices so far as to make themselves obnoxious and ridiculous in the eyes of clients by their insistence upon questions of design in which the client has a perfect right to claim consideration. There is no surer mark of narrowness and lack of cultivation than intolerance; and intolerance and bigotry are vices which architects, of all men, should strive to avoid.

There is a chronic disposition on the part of architects to complain of the unreasonable conditions under which they are compelled to work. There is no doubt that most of these complaints are just. The competitive system, or lack of system, by which designs for public buildings are commonly obtained could hardly be worse than it is at present. Where public work is placed in the hands of an official architect the result is very rarely satisfactory. The amount of work required of an architect on private buildings is all out of proportion to the pay allowed, when this is compared with the income of men in other professions; and the demand upon architects is constantly growing both in amount and in the quality of service required, while there is little recognition on the part of the public of the burdens which these requirements place upon the practitioner. These are sound and vital grievances

which all right-minded persons will agree should be remedied.

On the other hand, the public may be excused for making such excessive demands, because of ignorance of the architect's aims and his professional limitations. It cannot be expected that the common people will ever come to know the details of the process by which a large building is conceived and carried into final execution, any more than it can be possible that everyone shall know the details of a lawyer's or a physician's practice. But the purpose for which lawyers or physicians are employed is now, and always has been, a definite one, and well understood. It is not so with an architect. If the purpose of a building be merely utilitarian, and nothing but a utilitarian result be expected or desired, either on the part of the client or the architect, the problem is a simple one and is merely a business transaction, the work of an engineer, not an architect. When, however, the question of building beautifully and appropriately is brought into consideration then the difficulties arise, and the question is at once complicated. In the present uncertain condition of popular appreciation of works of art, the absence of popular standards of beauty in architecture, and the conflict between the utilitarian money-getting tendency of modern civilization and the higher motives of the few who are striving for something more than material prosperity, these conditions are only natural, and may be looked upon as steps in the process of evolution which will lead to a final and satisfactory solution of this vexed question. In the meantime the public (as distinguished from the architectural profession) should be considered.

At the recent "IVE Congrès International des Architectes," — a congress organized by the Société Central d'Architecture de Belgique to mark the twenty-fifth anniversary of its foundation, — three hundred delegates were present, representing fourteen different countries. The American delegation consisted of Mr. George Totten, who represented the U.S. Supervising Architect of the Treasury, Mr. Albert Kelsey,



who represented the "T Square Club" of Philadelphia, and Mr. James T. Kelley of Boston. Mr. Kelsey delivered to the Congress an address in French, of which we subjoin a translation:

*Monsieur le President and Gentlemen:* The architectural society which I have the honor to represent at this Congress, has assumed, as its title, "The T-Square Club," and as its emblem, the draughtsman's T-square. Counting as its members more than one hundred and fifty architects, it stands today among the principal architectural societies in the United States, and has a recognized and active influence in the wide field of our profession.

Our Club, founded and incorporated under the laws of the State of Pennsylvania in 1883, is now entering upon its fifteenth year of useful and practical effort. The President, Mr. Daniel Knickerbacker Boyd, has so widened its sphere of action that, today, it is not only affiliated with the University of Pennsylvania, the Philadelphia Fine Arts League, and the Pennsylvania Academy of Fine Arts, but co-operates with almost all the other architectural organizations in the United States. It has the honor to be the only society of American architects represented at an International Congress held in Europe.

There is at the present time a great and widespread revival of popular interest in architectural matters in the United States. New schools, new clubs, new associations and new societies are being formed; and numerous travelling scholarships are every year accorded to our most promising students of architecture, by which means they are enabled to go abroad and there finish their professional education. At the present time no fewer than one hundred American students have either been already admitted, or are candidates for admission to the Ecole des Beaux-Arts in Paris; and many others are engaged in sketching throughout Europe. Excursions of this latter kind, or two months of practical work during every summer in the office of some practicing architect, form a prescribed part of the official program in most of our architectural schools and universities. An "American Academy" has been this year incorporated in Rome.

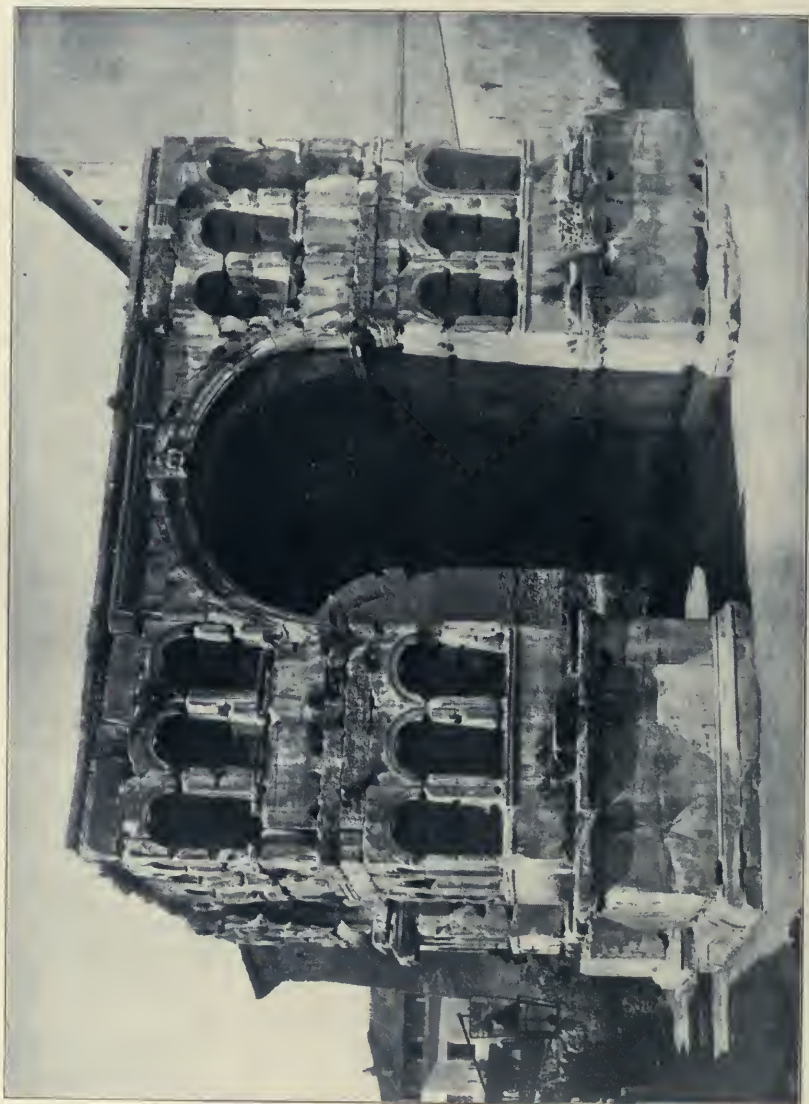
Among our reproductions of continental architecture in the United States we have, in Florida, specimens of the Spanish Renaissance style, as beautiful as any in Spain; in Philadelphia we have a high Bourse building, the ground floor and the first story of which, in the style of Francis I., are as exquisite examples of that style as any in France; in New York we have a "Giralda" Tower from Saville; and in Boston a perfected "Library of Sainte Geneviève."

But we are still waiting with impatience for the appearance among us of a style which shall mark and be inspired by our own times,—a style modern, national and indigenous.

Now, we of Philadelphia, are actively in search of this modern and national style, and at the meetings of the "T Square Club" you may find practicing architects who have been for ten years "anciens" of the Beaux-Arts in Paris, much travelled professors from our colleges, the most distinguished of our self-educated architects, students in the Pennsylvania schools of architecture, and draughtsmen,—all meeting upon a level of equality and freely offering the fruits of their intelligence for the advancement of an architecture which shall be purely American.

This is why I have been chosen to represent our Society at the International Congress of Architects. I am come, not only to be present as a delegate, but also, as a student, to take account, as accurately as possible, of all which goes on at this reunion; to take note of all which may in any way advance and facilitate our work at home; to render an account to my colleagues of the beauties of your numerous and splendid specimens of architecture, ancient and modern; and, moreover, to carry back with me what I have heard from the lips of the distinguished orators who have spoken here. I am, in fact, to carry back all possible architectural baggage which shall not be subject to duty under the rapacious provisions of the Dingley Bill.

In conclusion, gentlemen, in acknowledgment of the kindness and hospitality which I have received in Brussels, let me not only thank you most sincerely for myself, but assure you that should



XLVII.

The Arch of Janus Quadrifrons, Rome.

any of the attendants at this Congress ever happen to be in Philadelphia, he will find himself received with open arms by the members of our society, who will be delighted at any opportunity to return the hospitality which has been shown their present delegate. I hope that, at the coming Congress of Architects, which is to be held in Paris in 1900, the "T Square Club" will be represented by a member who shall be older, of more experience, and more worthy, than him to whom you have listened with such attention and indulgence.

The last issue of *The Architectural Review* contains the first of a series of articles by Mr. Bertram Grosvenor Goodhue, in which the author describes a visit to an ideal mediæval town and illustrates his description with sketches of the buildings as they appeared to the eye of his imagination. The process by which these figments of a prolific brain were evolved is the same as that employed by any matter-of-fact architect in working out the every-day problems of actual practice; except that the designer was untrammelled by the restrictions of capricious clients, and commonplace difficulties of cost, site and construction, and was left free to compose his buildings and groups of buildings at his own sweet will. As might be expected, there is a charm in the result which is best compared with the musical compositions of Liszt, Grieg and Saint-Sæns—an utter abandon coupled with an underlying knowledge and recognition of form and propriety. Like the etchings of Whistler, in his freer manner, such as his representations of the Thames, the drawings show a wonderful conception of the picturesque and an ability to depict it with little labor and in the most direct way. The technique employed has a great fascination in itself, and is the mark of an artist who has mastered his materials. Doubtless Mr. Goodhue's drawings of the buildings he has actually constructed are already familiar to most architectural readers, but this series will introduce him in a new rôle, and show a more personal and individual side of his work than his former efforts afford. The draw-

ings here shown represent Mr. Goodhue at his best.

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## Notes.

Mr. G. Fugman, a Cleveland architect, has invented a method of fire-proof construction, that in some points is an improvement over present methods. It is founded on a well-known principle in strength of materials, and whether used for walls, partitions or floors, saves space. It is very quickly and cheaply put up, extremely rigid, vermin proof, affords space for wiring and piping, and costs but a small per cent over ordinary combustible construction. Mr. Fugman has carefully tested it in work of his own; and it is now being thoroughly tested by a prominent engineering firm. As soon as these tests are completed and the results tabulated, it will be put on the market by the Berger Manufacturing Co. of Canton, O. For schools, apartment-houses and hotels, it bids fair to prove a distinct advance in constructive methods; and Mr. Fugman is confident of practically demonstrating it to be the best known method for dwelling-house construction.

The draughtsman who has never drawn upon "English Metallic Paper," has missed one of the pleasures of his calling. It has for years been a favorite with architects who have sketched in lead pencil, and it is safe to say that a greater number of architectural sketches have been made upon it than upon any other one kind of paper. It has a smooth surface and is pleasanter to the touch than the hot-pressed papers, and at the same time has a "tooth" which takes and holds the lead and gives a crisp effect to the drawing which can not be obtained in any other way. It has until recently been difficult to obtain this paper in America, and many draughtsmen who might otherwise have used it have not been able to obtain it except through friends who have brought home a supply from abroad. There is now, however, no difficulty in this direction, as Messrs. Frost & Adams, 37 Cornhill, Boston, are carrying it regularly in stock. Their advertisement will be found in this number.



XLVIII.  
Roman Arch at Rheims, France.





XLIX.

Capital, Palazzo Gondi, Florence.

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# THE BROCHURE SERIES

## OF ARCHITECTURAL ILLUSTRATION.

VOL. III.

JULY, 1897.

No. 7.

### FLORENTINE RENAISSANCE CAPITALS.

THE fifteenth century in Florence is memorable most of all, perhaps, for the rise of the Medicis. Their cause and that of Florentine art are so closely allied that it is impossible intelligently to understand one without knowledge of the other. It is to this family that Italy and the world owes its gratitude for the new birth in art. There was, deep seated in their minds and hearts, such firm faith and sure taste, such tact in dealing with men as was necessary to raise the artists of the time from the despondency and torpidity in which society had long left them languish. Their energy and enthusiasm branched out in all directions at once, and it is safe to say that no Florentine art failed to feel their influence: architecture, sculpture, painting, decoration in all its forms, profited by their patronage. Cosimo, the elder, is the builder of the family; and architecture under his will and taste took great strides in Florence, in a direction new to the world. To him many of the finest Florentine churches owe their erection. Cosimo had the art of making every man his debtor; and he first established the intimacy between himself and the Florentine artists that was to become an important tradition of his family. Brunelleschi, whom he es-

pecially favored, became his right-hand man. Architecture, in the skilful hands of this artist, took new form. He originated and built up a new style based upon the classic. Early in life he went to Rome, and so diligently studied the monuments of Roman architecture that he became thoroughly imbued with the classic spirit; and alone, without master or contemporary to aid him, he gave the death blow to the Italian Gothic.

The Gothic and the Roman styles of architecture are as radically different as it is possible to imagine. They are the expressions of peoples fundamentally at variance in habits and culture. One style lofty and aspiring, is characteristic of a northern race full of imagination and restlessness; the other broad and low, regular, is the fitting expression of the nature of Greek, Roman and Etruscan. To understand the attitude of the artists of the early Renaissance, it is perhaps necessary to know what reception Gothic architecture was given in Italy. There were obstacles in the Italian nature that this northern style found it difficult to overcome. It met with many vicissitudes. The Italian national instinct was always in revolt; and to be accepted at all, the Gothic style had to undergo almost cruel mutilations. The Italians were so fond of



L.

Capital, Palazzo Gondi, Florence.

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clean, sharp outlines in their plans that they preferred to obtain effects of grandeur by accessories rather than to change the main lines. The Cathedral at Florence, for example, has no lateral chapels to break the plain surface of its walls.

The choice of a new style in the fifteenth century was accompanied by its inevitable, and perhaps not unpleasant, results. The architecture of the beginners of the Renaissance is youthful; there are to be found in this early work qualities that, on account of their newness, are timid, fresh and chaste.

The distinctive mark of the fifteenth century is the struggle between the picturesque of the middle ages and the simplicity of the classic. The men of the new school tried more and more to treat architecture as an abstract art. The discovery by Brunelleschi of the Roman rules of building had the almost sure result of making the first attempts toward return to the classic too mathematical. Fantasy, that was doubtless a relic of the preceding mediæval architecture, was subordinate at first to severity; and finally it disappeared altogether, and dry and cheerlessly accurate logic took its place. These early architects discarded as illegitimate all means but the simplest for gaining effect, and preferred to restrict themselves to the narrow rules of the ancients. Brunelleschi at his first opportunity,—in the church of San Lorenzo,—took the early Christian basilica for his model. In façades flat surfaces relieved only slightly with mouldings were depended upon for effect. To obtain harmony, and at the same time life and movement by this seemingly inadequate means, was the ideal of the early school. Perhaps Brunelleschi and Alberti may have approached the goal, but it was to the sixteenth century that Italy was to owe the perfection of this style. These men of the early part of the fifteenth century are called the purists of the Renaissance, and the stiffness that comes of unfamiliarity and newness was worn off in the years to follow.

The difficult problem of intricate vaulting that forms so interesting a feature in Gothic work is done away with

in this new school; yet it seems that this was wholly from the point of view of taste, for Brunelleschi, at least, proved himself a skilled engineer in the matter of construction. So great was the reaction against the Gothic, that the desire was to simplify as much as that style had elaborated; imagination and playful fancy gave way to the hardness of rule. Regularity, purity, and above all, symmetry, were the ideals sought. The obvious results of all this conscious striving for simplicity were coldness and lack of variety, sometimes almost crudeness.

The great architects of the period, Brunelleschi, Alberti, and the two San Galli, were not too intolerant of the Gothic. They copied the antique without dreaming of attacking their predecessors; there is no sarcasm in Alberti's book on the art of building. They believed in order and symmetry and the application of science to art.

It is perhaps interesting to know something of the methods and mode of work of the Florentine architects of the fifteenth century. Then, as is common today, the architect superintended the work that he designed. It is said that Giuliano di San Gallo, the architect of the Palazzo Gondi, superintended even buildings that he did not design. There were also certain architects of such considerable importance that they were known as consulting architects, and made drawings for distant places. Their compensation was often a gold chain, a fine cloak or a piece of land.

In that age of genius an artist rarely devoted himself to architecture alone. They were men of many arts. Brunelleschi and Alberti were painters; many were sculptors, but most often architects were workers in wood,—inlayers or carvers. San Gallo was of this class. While the simplicity of the buildings, for the most part, required no great knowledge of complicated problems of construction, there is reason to believe that this branch of architecture was thoroughly mastered.

In the fifteenth century, as in all epochs in which energy and originality are feeble, there was much red tape and turning over of papers. Munici-



LI.

Capital, Palazzo Gondi, Florence.

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palities, especially, were fond of shielding themselves from responsibility by hiding behind innumerable committees of consultation, as they called them. Deliberation and discussion delayed operations; this plague infested Florence especially; and it was not uncommon there for the work to be interrupted so long that taste changed and the building was left unfinished. Many a fine example of architecture is today, on that account only, without roof or façade. It took all the astuteness of Brunelleschi himself to overcome such obstacles.

The competitive designs of that time usually consisted of plan, elevation and section. To support these drawings it was the invariable custom to present a model of wood. This model was carefully and intricately worked so as to give an adequate idea of the finished building. In the haste of today there is little time for such precautions, yet too many of our buildings show sad lack of such careful study.

When the designs were accepted the force of mechanics and laborers was organized. The rough work was let to a contractor for a fixed sum. The rest of the work was usually done by the day. A great army of inspectors and superintendents was always about, and among its numbers were often men of acknowledged artistic merits, such as painters and sculptors.

The laying of the corner-stone was an occasion of great solemnity among the Florentines, and not infrequently long delay was necessary if the horoscope was inauspicious.

In such an age, were the capitals here illustrated designed and executed. It does not require, perhaps, too keen an eye to discover certain traits and results of the time.

## XLIX. TO LI.

CAPITALS FROM THE PALAZZO GONDI, FLORENCE.

The Palazzo Gondi is the work of Giuliano di San Gallo and was built in 1490. The capitals are from the columns in the arcade of the courtyard. They show a distinct return to the classic. Both Corinthian and Composite orders have been here used by San Gallo. The foliage is crisp and

clear cut, and has vigor as well as delicacy. It is worth while to note the use of fruit and urn in one of these capitals, as it is a somewhat early and certainly excellent example of the introduction of heterogeneous motives of ornamental detail which was to become in the sixteenth century so characteristic of the Renaissance style.

## LII.

CAPITAL FROM THE CHURCH OF S. SPIRITO, FLORENCE.

The column capital from San Spirito is a good example of the Renaissance Corinthian order. While the church was designed by Brunelleschi, it was not finished until after his death. This capital is probably the work of San Gallo.

## LIII. TO LVI.

CAPITALS FROM THE CHURCH OF THE BADIA, FIESOLE.

Up to 1028, on the site now occupied by the Badia, stood the Cathedral of Fiesole. At that time a new cathedral was built nearer the town and a convent was erected on the old site. It was occupied for several centuries by the Benedictines. About 1430 Cosimo de Medici had the church and convent rebuilt by Brunelleschi, and a library gathered by his librarian Vespasiano.

The old façade in the style of the Pisan school of the eleventh century, was preserved by Brunelleschi, an example of respect for the past not often met with. The interior, however, shows the hand of the master. The whole is simple and sober, with the resources of ornamentation proudly disregarded.

The cloisters are light and delicate, for in this kind of architecture Brunelleschi excelled not less than in monumental work. Everything here recalls Cosimo. His coat-of-arms, a shield of bold character with the seven balls of the Medicis, is much in evidence. The consoles at the spring of the vaults are carved with a ring in which are crossed two pens,—a favorite emblem of this patron of the arts. The capitals here shown are from the covered portico.



LII.

Capital, Church of San Spirito, Florence.

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# The Brochure Series of Architectural Illustration.

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While the Editor of THE BROCHURE SERIES cannot hold himself responsible for the care of unsolicited photographs, drawings or manuscripts which may be submitted to him, he will always be glad to consider them; and will return those that he cannot use when postage for that purpose is provided.

## New Series of Brochure Competitions.

### COMPETITION "A."

The interest which previous Competitions in the Brochures have awakened has determined its Editor to undertake a new series; and the rules and conditions of Competition "A" are announced on advertising page iii of the present issue.

The subject of this first Competition will be a design for a decorative border to surround Bates & Guild Company's announcements of their publications in THE BROCHURE SERIES. It is therefore necessary, in making the design, to bear in mind that it is to be printed in juxtaposition with type, and that its object is to render the looks of the page more attractive. It is also to be remembered that, required to fill a certain space, the design must exactly conform in proportions to the figures specified, and that any deviation from these proportions will render it useless for the purpose. The limitations of the process by which it is to be reproduced make it imperative, in addition, that the design shall be drawn in black lines on white paper.

The prize-winning design is to become the property of the Publishers. Other submitted designs will, under certain conditions specified in the rules which are to govern the contest, be

returned to their authors; although, to add interest to the Competition, the Editor will, at the time that the announcement of the award is made, publish reproductions of those which the judges consider of sufficient merit.

The rules which are to govern this Competition have been made as few and simple as possible, and it is stipulated that they be strictly adhered to.

If there are any details which the present announcements have failed to make clear, the Editor will be glad to make further explanations to correspondents.

All drawings must be received at the office of THE BROCHURE SERIES on or before November 15.

"As the Lady from Philadelphia came up the gravel path the Peterkin family were standing in perplexity about the red cow.

"I believe it is impossible," said Mr. Peterkin, with decision. "The red cow cannot be got into the barn! It is not because we haven't tried. I have pushed her in front, Mrs. Peterkin has pushed her from behind, Solomon John has pushed her from the right and Elizabeth Eliza has pushed her from the left. We have all pushed with assiduity; and there," said Mr. Peterkin with an impressive gesture, "there she stands!"

"Perhaps," said the Lady from Philadelphia, as she lowered her parasol, "if you all got behind her, and pushed in the same direction, it might be more effectual."

"Mr. Peterkin gazed about at his family. 'Dear me,' he said, 'how extraordinary! Now why didn't we think of that?'"

You, dearly beloved Brethren of the Architectural Clubs, are respectively Mr. and Mrs. Peterkin, Solomon John and Elizabeth Eliza: the architectural movement in this country is the Red Cow.

No doubt you are all pushing "with assiduity" toward better things, but are you all pushing together? Your influence is, for the present, limited to the little circles of your several localities; and your efforts are directed toward several and individual aims. For some time to come, of course, this diffusion of energy is to be expected. You are engaged in solidifying your organizations, in finding out how your members work best together and, no less important, how they play best together. But in the future more may be expected of you. Individual



LIII.

Capital, Church of the Badia, Fiesole.

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action is good, but combined action is better; and some day, when the proper occasion has arisen, we hope to see you all striving in one united effort toward some great object. Suppose (to take a specific example) the voice of every architectural society in the Republic was to be raised in a common protest against the erection of some unworthy national building, or to urge upon our legislators the need of some national enactment. The effect of such a concurrent exertion would be potent, yes, irresistible! The power to bring it about lies in your own hands.

But, devoutly as such a consummation is to be wished, it must be apparent to the most sanguine that the time for it is not yet ripe. We must wait with patience till your organizations have taken firmer root, and until—a prime necessity—you shall, as societies, have become better acquainted with one another. For you will need to have discovered each other's aims, to have learned from each other's experience how best to work and play,—in a word, to have fostered a feeling of kinship, before you can stand shoulder to shoulder as allies behind the Red Cow.

To bring about this feeling THE BROCHURE SERIES offers its services, and asks for your coöperation. We have in the past published some news from the various architectural clubs. In the future we mean to publish more. Indeed, we want the BROCHURE to become the recognized "organ" of the architectural clubs of America. Will you lend a hand?

The Editor has already communicated with many of the societies to ask for their help in this undertaking; but there are many more; and he asks now that the Secretary of any such organization who reads this paragraph will send him his name and address; and that every member will aid in the good work by communicating to him all items of society news that he can lay hands on. Nothing, however trivial, that one Club is doing is likely to be uninteresting to another of its kind; and this common knowledge will be the greatest common bond.

Here, brethren, is to your better acquaintance!

And now, the ink hardly dried on the foregoing words, comes a message from Philadelphia which makes us glad to qualify the statement that all architectural societies are still in the self-solidifying state; and affords a first-rate example of exactly the work that such societies ought to be up and doing. The T-Square Club, already firmly on its feet, already affiliated with other organizations, already making its power felt, has voiced an outspoken, vigorous and indignant protest against the action of the Pennsylvania State Capitol Commission. Here is the case, in outline:

The State of Pennsylvania proposes replacing its Capitol Building, which was destroyed by fire, with a new structure. A commission was appointed, a competition decided upon, and a programme (the fairest, most explicit and apparently the most binding that has been issued in recent years) was prepared by Prof. W. P. Laird, as professional expert. The commission unqualifiedly bound itself, in this programme, to select an architect for the building from the authors of the first eight designs chosen by an expert jury, consisting of Professor Laird, Messrs. J. M. Carrère and Walter Cook. The experts and the architects have fulfilled their part of the contract to the letter. The commission has, however, entirely disregarded the report of its experts, thrown aside all of the designs and called for a new competition. This is said to be the result of the perfectly proper action of the experts in refusing to consider a design which did not conform to the conditions of the programme. There was apparently no way in which the majority of the commission could carry out its wishes except by openly repudiating its former promises, and this it did not hesitate to do.

At the meeting of Executive Committee on the 17th of September, the T-Square Club adopted and published the following resolutions:—

*Whereas*, A majority of the State Capitol Commission has violated its agreement with competing architects; has treated its able and conscientious expert adviser, Prof. Warren P. Laird, with contempt; has discredited, not only him, but the other members of the expert jury, Mr. Carrère and Mr. Cook; and



LIV.

Capital, Church of the Badia, Fiesole.

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has made statements to justify its dishonorable action, which statements are denounced as unfair and untrue, both by the jury and by the Governor as head of the Commission; Now, therefore, be it

*Resolved*, By the T-Square Club, that the said majority of the Commission, in violating their agreement with competing architects, and in disregarding the recommendations of their own experts and the warnings of the Governor, have proved themselves unfit to be trusted, and should be impeached.

*Resolved*, That the T-Square Club denounces and repudiates any member of the profession of architecture who has lent or shall lend himself to the dishonorable action of the Commission.

*Resolved*, That the published statements of Senator McCarrell, justifying the repudiation of the contract and of the experts' report, are misleading and false, for the following reasons:—

*First*—The terms of the programme were mandatory as to the areas of the rooms required—advisory only as to the total cubic contents of the building, and silent on the subject of materials or finish intended, the competition being expressly framed to select an architect on the basis of qualifications demonstrated by the designs.

*Second*—The economy of any design being determined by three factors—size, simplicity of construction and materials—it is evident that a design of a given size would vary in cost according to the materials used. From Senator McCarrell's published quotations from the experts' report, it is plain that the designs recommended could, in the judgment of the experts, be built within the appropriation.

*Resolved*, That the architectural profession, and the citizens of this Commonwealth, are warned that the evident intention of a majority of the Commission to select an architect without reference to the terms of the contract they have made, is a public scandal which calls for immediate correction.

*Resolved*, That this Club pledges itself to the distinguished and honorable Board of Experts to uphold them and the reputable element in the profession in their protest against the disgraceful action of the majority of the Commission.

HORACE H. BURRELL,  
*Secretary pro tem.*

DAVID KNICKERBACKER BOYD,  
*President.*

Bravo, T-Square Club!

About thirty-five Americans are expected to present themselves this year at the fall examinations for the *Ecole des Beaux-Arts* in Paris.

The admission requirements for the *Ecole* differ so materially from similar examinations held by the architectural schools in this country, that it may interest our readers to learn what they are.

An American applicant is required, first of all, to present a letter of introduction from the diplomatic representative of the United States, attesting the place and date of his birth; and, in addition, a certificate to show that he is "sufficiently prepared to attempt the examination." The examinations are held in the spring and fall of every year. The first test requires the student to make an architectural composition, to be executed *en loge* within twelve hours' time. The *loge* is a sort of cell into which the student is locked with his food and drawing materials; and the door is guarded by a porter to prevent the accession of any aid from the outside until the drawing is completed. If he successfully passes this preliminary test, he is then allowed to take the following examinations: 1, Drawing of a head or an ornament from a cast, eight hours; 2, Modelling of an ornament in bas-relief from a cast, eight hours; 3, Exercises in computation, of which one involves the use of logarithms; 4, Examination in arithmetic, algebra, and elementary geometry; 5, A problem in descriptive geometry applied to an architectural drawing, eight hours; 6, Examination in descriptive geometry; 7, Oral and written examination in ancient and modern history.

This last historical examination is of no great difficulty; but the authorities of the *Ecole* purpose to increase the present requirements in descriptive geometry and logarithms. As all the mathematical examinations are already pretty thorough; and as, contrary to our American method, they approach the subject rather from the theoretic than the practical side, we fancy that, without special coaching, the average American candidate would find himself floored. How many American college graduates could answer, for example, the apparently simple fifth question on the arithmetical paper: "Prove the *theory* of multiplication by the use of the number 9"?

In the *Ecole's* recently held "Concours de Rome," the Grand Prix was won by M. Duquesne; the two minor prizes by MM. Garnier and Alfridson.



LV.

Capital, Church of the Badia, Fiesole.

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Of the architectural schools outside the universities and colleges, perhaps the most important and successful one in this country is the Atelier Masqueray in New York, now in its fifth year. It is in charge of Mr. E. L. Masqueray, former pensionnaire of the Institute de France, and pupil of Ginain in the Ecole des Beaux-Arts. Students of any degree of proficiency are received in the evening classes, and advanced students have the use of the Atelier at all times. The system of instruction is exactly that of the Ecole des Beaux-Arts.

The annual dinner and business meeting of the Atelier was held at the Hotel Hungaria on September 14.

The following officers were elected: *Massier*, Mortimer Foster; *Bibliothecaire*, Leonard Schultze; *Caporal des nouveaux*, Sylvester S. McGrath; *Members of the Executive Committee*, Karl Richardson, Lester A. Cramer, Edward J. Willingale, Clarence E. Decker.

The enlarged quarters of the Atelier, at 126 East 23d street, were opened the following evening. The old students and a good accession of *nouveaux* are getting down to hard work, and a successful winter is assured.

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### Notes.

The specification and contract forms published by the Keuffel & Esser Co. of New York, are exactly what might be expected from a house that has for years made the most precise and accurate of mathematical instruments. In their preparation the best legal advice has been had, and there is no more uncertainty or incompleteness about them than about one of the surveyors' transits made by this company. The price list in their advertisement shows that they are as cheap as the poorer forms supplied by stationers.

Some of the best and the poorest cements on the market are "Rosendale" cements, so called. Therefore it is a matter of greatest importance that the right *brand* be definitely specified, and no substitution be permitted.

The old and well tested "Brooklyn Bridge Brand," made by the N.Y. and Rosendale Cement Co., meets every requirement. It is absolutely hydraulic, dark, finely ground, uniform, and will take a large proportion of sand. Its use on many large bridges, on government works, and on such well known architectural works as the Astoria Hotel, the thirty-story Park Row Building, Columbia University new buildings, Hotel Manhattan, St. Luke's Hospital, and the New Netherlands Hotel in New York City, shows that it has passed tests that have been a bar to the use of many of the brands that are claimed to be equally good, a claim that always more firmly establishes the standard brand.

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### Personal.

Albert Kelsey, the holder of the University of Pennsylvania Travelling Scholarship, is devoting his time assiduously to study, besides keeping constantly in touch with his friends at home. He is doing excellent work abroad in making known to the old world that we have in America an aggressive architectural organization of young and brilliant men, known as the T-Square Club.

The American Academy in Rome has been fortunate in securing the services of Mr. Samuel A. B. Abbott for the position of resident director of the school. Mr. Abbott will take charge of the work at once, and sail immediately for Rome. Although not an architect, he is eminently fitted for the position. It is through his personal efforts as president of the trustees of the Boston Public Library, that the citizens of Boston have secured an architectural monument of which they are justly proud; for, although upheld by his associates on the board, he is to be given main credit for the opportunity afforded Mr. McKim to thoroughly carry out his ideas in the building. The Academy at Rome may now be considered as established on a firm foundation with a bright future before it.



LVI.

Capital, Church of the Badia, Fiesole.

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LVII.

Galerie D'Honneur of Catherine de Medici, Chateau Blois.

# THE BROCHURE SERIES

## OF ARCHITECTURAL ILLUSTRATION.

VOL. III.

AUGUST, 1897.

No. 8.

### INTERIOR DECORATIONS, CHATEAU BLOIS.

"**B**ALZAC was afraid," says Cook in his description of the Chateau of Blois in "Old Touraine", "that later generations would know nothing of the chateau save from his pages; so far advanced, in his day, was the ruin and decay of the whole fabric. But that ruin has been suddenly and thoroughly arrested; the hand of the conscientious restorer has intervened, and that with a lavishness of display, an ingenuity of detail, very rarely equalled. The 'buried world,' upon which three centuries of kindly time had laid their touch, has been refashioned in a somewhat garish blaze of gold and carving; there are but few 'mysterious shadows' in these brightly-colored rooms; there is but little left to fancy, to the dreams of the imagination, in a reconstruction so painfully complete.

"Yet it is difficult to find fault with that spirit of almost reverential care which has given us back the great castle of Pierrefonds, with all its intricacies of defence, which has restored the walls of wondrous Carcassonne, which has preserved the marvels upon Mont St. Michel; and of the two extremes, Blois is perhaps nearer to what is possible for us of perfection than is Chinon, deserted, ruined past recall. To few houses is it given as to Langeais, or Azay-le-Rideau, to escape decay and yet preserve the mellowed beauty of the past—a beauty like the golden haze upon a famous picture, or the strange

bloom upon an antique marble, which is something different from any hues or colorings wrought by the hand of man.

"But at Blois no change, no renovation can check the rush of memories that press upon the traveller directly he has crossed the threshold beneath the statue of the good King Louis, for the threefold fashion of the architecture around him speaks eloquently of the three great ages through which the life of the castle has passed. The early years when the Orleans princes were educated here, and Valentine Visconti mourned her murdered husband; the terrible days of the sixteenth century, when Guise was murdered above the exquisite carvings of the central staircase; finally, the decaying glories of Gaston and his daughter, fitly framed in the ruled lines and spaces of the frigid building opposite the entrance."

M. Duban, the architect charged by the French government with the work of restoration of the chateau, has, perhaps, come as near to a satisfactory reproduction of the original condition and appearance of the building as could be expected. Work was begun under his direction upon the Francis I. wing in 1845 and was continued in later years until 1870 on the Louis XII. wing and other portions of the chateau.

The present buildings of the chateau nearly surround an irregular quadrangular court, and belong to three distinct periods. There are in the



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Chateau de Blois. Aile de François I<sup>er</sup>. Plafond de la Chambre du Roi. N<sup>o</sup> Plaf.

LVIII.

Ceiling of the Chambre du Roi, Chateau Blois.

interior walls some remains to be seen of the mediæval buildings before the time of Louis XII.; but this monarch was the first whose work appears in the structure as we know it today. The wing on the northeast is his, and is one of the most charming examples of domestic French Gothic architecture which now exists. The wing of Francis I. followed in the sixteenth century, and is the pioneer of the Renaissance style in France. In 1635 François Mansart began to build the southwest wing as the palace of Gaston d'Orleans, after having overthrown the buildings of the fifteenth century which had occupied this site. The quadrangle is nearly closed by a little chapel—part of the wing of Louis XII.—on the southeast.

The Francis I. wing, which contains the rooms and decorations which form the subject of our illustrations, is often spoken of as the most beautiful example of the French Renaissance style. This judgment is based upon its present restored condition which reflects great credit upon the architect who has rejuvenated it as well as upon the original builders. It was built only about fifty years later than the adjoining wing of Louis XII., which is distinctly and entirely Gothic, and is really transitional, exhibiting many of the characteristics of both Renaissance and Gothic styles.

The most eminent Italian architects, painters and sculptors were received with the greatest respect, and entertained at the court of Francis I.; and their suggestions were adopted by the native builders of the time. Thus the work of this period is Renaissance in general design but with the freedom and spirit in detail of the Gothic. All of the wing which forms the right of the interior court towards the northwest was built by Francis I., whose emblem, the salamander, is found carved in innumerable places. It also bears the devices of Queen Claude and was constructed, as this fact demonstrates, in the early part of the sixteenth century, before 1525. This was the residence of Henry II., Charles IX. and of Henry III., who here assassinated the Duc de Guise.

The interior of this wing is divided, on the first floor into several large halls and numerous smaller rooms, the original use of which it is now difficult to determine, although they have been but little changed in restoration. On the floors above more restoration has been necessary; and it has been possible to identify the rooms with more certainty. Of these the apartments of Catherine de Medicis are possibly the most interesting. The apartments are, in most cases, of moderate size, but are elaborately enriched. Relief ornament is usually confined to special features such as mantels and doorways; but surface decoration in color is lavishly applied in all places. The colors are rich and rather heavy in general effect; brown, red and the stronger tones predominant, with a free use of gold. Greater contrast and intensity of color is frequently obtained by outlining forms with white or complimentary colors; and the whole effect is, at first and in its present condition, too complex and too positive to be entirely pleasing. It is not a safe scheme to adopt in any but exceptional cases.

The illustrations have been chosen to give a conception of the decorative scheme as a whole, by showing two views of interiors; and furthermore to show in detail the patterns of ornament at larger scale.

## LVII.

GALLERIE D'HONNEUR OF CATHERINE DE MEDICIS,  
CHATEAU BLOIS.

The decoration of this room is sufficiently explained by the foregoing notes to give a fair idea of the scheme adopted. It may be unfair to judge of the effect without the addition of furniture and accessories which are necessarily a part of the conception of any such decorative composition. It must also be borne in mind that these were royal apartments; and that the habits of life and the dress of the day for which these surroundings were intended differed fundamentally from our own—that the customary dress of men and women alike would easily bear this display of intense color and form as a background.



LIX.

Ceiling of the Galerie D'Honneur of Catherine de Medicis, Chateau Blois.

LVIII.

CEILING OF THE CHAMBRE DU ROI,  
CHATEAU BLOIS.

LIX.

CEILING OF THE GALLERIE D'HONNEUR OF  
CATHERINE DE MEDICIS, CHATEAU BLOIS.

LX.

CEILING OF THE CHAMBRE DE LA REINE,  
CHATEAU BLOIS.

The flat decorations, like the relief sculpture of both exterior and interior, show the frequent introduction of the symbols, marks and emblems of the families who built or occupied the apartments. The only example shown in the illustrations of this number is that on plate LXIV., in which the "H" of Henry II., surmounted by a crown, is used in the repeating wall-pattern. The salamander, the porcupine, the serpent, the initials of Diane de Poitiers, of Catherine de Medicis, of Claude and others of the royal families frequently appear.

LXI.

PRIE-DIEU DU ROI, CHATEAU BLOIS.

LXII.

WALL DECORATION. ANTI-CHAMBRE DU ROI,  
CHATEAU BLOIS.

LXIII.

WALL DECORATION, CHAMBRE DE CATHERINE  
DE MEDICIS, CHATEAU BLOIS.

LXIV.

WALL DECORATION, CHATEAU BLOIS.

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## Club Notes.

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Two Architectural Clubs which, either on account of the late—we hope we may say late—business depression, or from other causes, have languished, are showing signs of renewing their activities. The Rochester Sketch Club, the first of these, which has held no regular meeting since its adjournment last May, although some of its members have since come together and formed classes for the study of mathematics, French, and the "orders," is now looking toward a reorganization.

The St. Paul Club, the second, which for a year or so has been practically out of existence, may be superseded by a club now in process of crystallization among the draughtsmen in Mr. Cass Gilbert's office, in that city.

At the October meeting of the St. Louis Architectural Club, the vice-president, Mr. Ernest Helfensteller, presided, as the president, Mr. Ittner (who, by the way, has been appointed Commissioner of Buildings to the School Board), was absent on a tour through the country for the purpose of making a study of school architecture.

The Committee on Publication reported in favor of the scheme for publishing the new Building Ordinance; and—a matter of grave surprise—Messrs. Enders and Bailey, the committee appointed to provide a suitable case, and to deliver to the T-Square Club the medal which was awarded at the Club's exhibition, reported that the work had been accomplished, and exhibited in evidence an express receipt. The design for this medal was by Mr. Enders, the modelling by Mr. Bailey.

There being "no more business to come before the meeting," the chairman then handed its conduct over to Mr. Hirano Lloyd as toastmaster for the remainder of the evening.

The Cleveland Architectural Club has just issued the advance sheets of an attractive catalogue for its Second Annual Exhibition, which is to be held in the New England Building on Euclid Avenue, (which, by the way, is the tallest building in Ohio, and proud of it!) from November the 15th to the 27th.

The exhibition will consist of Architectural Drawings of every description, Photographs, Landscape Architecture, Interior Architecture and Decorations, Architectural Metal Work, Sculpture, etc. Contributions to the regular Exhibition will be made by the Cleveland Club, assisted by all the Architectural Clubs and leading Architects and Artists throughout the country.

H. B. Pennell, the last winner of the Rotch Travelling Scholarship, has just sailed for his two years' sojourn abroad. Mr. Pennell has the advantage of some of his predecessors in being already familiar with his field from former visits to Europe, and will doubtless reap a rich harvest.



LX.

Ceiling of the Chambre de la Reine, Chateau Blois.

# The Brochure Series

## of Architectural Illustration.

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While the Editor of THE BROCHURE SERIES cannot hold himself responsible for the care of unsolicited photographs, drawings or manuscripts which may be submitted to him, he will always be glad to consider them; and will return those that he cannot use when postage for that purpose is provided.

## New Series

### of Brochure Competitions.

COMPETITION "A."

The judges in this Competition (of which the details and rules are given on advertising page iii of this issue) will be Mr. C. Howard Walker, Instructor in Ornament at the Massachusetts Institute of Technology, Mr. Bertram Grosvenor Goodhue, whose work as a draughtsman is described on another page, and the Editor of THE BROCHURE. In addition to selecting the winning design, the judges will briefly criticize all other designs which they deem of sufficient merit to warrant their reproduction in THE BROCHURE for comparison with the prize drawing. Designs must be received on or before November 15th.

The latest number of the *Architectural Review* (Volume IV., Number 6) contains, beside the usual quota of editorial comment and its reviews of current periodicals, two articles of unusual force, dealing with the vital question of architectural competitions. The first is an authoritative and just account of the recent scandalous "Pennsylvania State Capitol Competition;" the second, by Mr. Russell Sturgis, reviews the history of competitions in this country, criticizes the agreement drawn up by some twenty firms of eminent architects regarding them, and

points out the dangers to which, under the present status, the competitor is exposed, and the regulations which, in self-protection, he should demand. The plates in this number include two drawings, made for the *Review* by Mr. Lewis Noxon, of the first story and cornice of The Society for Savings building, Hartford, Conn., of which Messrs. Peabody & Stearns are the architects. There are also some very interesting studies, by Mr. R. Clipston Sturgis, of interior details.

## Bertram Grosvenor Goodhue

The title of artist-architect seems to have now considerable vogue. We are not sure that we know precisely what it means. We imagine, however, that it is generally intended to signify something more than an architect, though it rather smacks at times of something less. Manifestly, therefore, we cannot make a perfectly innocent use of the expression, and we prefer to classify Mr. Goodhue in our own way.

Everyone has heard of Cram, Wentworth & Goodhue, and knows what very able work they are doing in late English Gothic. Though we usually suspect this particular type of superlative, are we wrong in saying that their suburban churches are quite the best in the country? The firm is young—very young. So are the men, (Mr. Goodhue has not seen twenty-nine), so they promise very brilliantly indeed.

The applause of the architectural profession, however, wakes but a weak echo in the outer world; so it is not as an architect nor even as an illustrator that Mr. Goodhue is best known to the general public.

The lovers of literature know him through his contributions to the revived art of good book-making, his decorative black and white designs for covers, borders, etc., being extremely quaint and charming. His most notable work in this field is to be found in the "Altar Book," published by Mr. Updike and illustrated by F. Anning Bell. The borders, initial letters and, we believe, even the type, are from designs of Mr. Goodhue.



LXI.  
Prie-Dieu du Roi, Chateau Blois.

Mr. Goodhue has actually used his pen in a literary way himself. Barring an article in the *Chap Book*, however, in which he dealt somewhat playfully with the writings of Mr. Cram, and another upon Traumburg, Bohemia, in *The Architectural Review*, referred to later, we have seen nothing of his literary output. What we have seen, however, is sufficient to convince us that he doesn't write with his ruling pen. After all, it is in his capacity as an illustrator that Mr. Goodhue is best known to us.

Cram, Wentworth & Goodhue owe no insignificant moiety of their fame to the charming manner in which their work is presented to the profession through the architectural periodicals. This may seem, at first blush (as far as it affects Mr. Goodhue personally), a compliment to the illustrator at the expense of the architect, suggesting the ingenuousness with which the Irishman lengthened his blanket by cutting a piece off the bottom and sewing it on the top.

It is only another way, however, of saying that the drawings have given added distinction to the designs. A good drawing and a good design may be two different things, but they have a decided affinity; and when they get mixed up no chemical critic dare swear he can tell fact from fiction.

But if the architects are fortunate in their illustrator, the reverse is no less true. The designs which come from this firm lend themselves very gracefully to picturesque illustration, and Mr. Goodhue may congratulate himself that he escapes the discouraging problems which so often confront the professional illustrator.

Very often the province of the architectural illustrator is to furnish an argument for the design which he illustrates. He becomes, as it were, an advocate for it, and so the more blarney he has the better. Mr. Goodhue has such a convincing way of demonstrating the pertinency of his English designs — of bringing them, with a little blarney, into sympathy with their surroundings, that we fancy he must play the very deuce with church committees. A reminiscent note is invariably struck by the close-cropped hedges

and then those "old homesteads" of ours (witnesses, mayhap, of a score of winters), how delightfully they sag out of sympathy with their prospective neighbor! And then, too, the ivy is already crawling up the tower walls, and real ivy at that — why, the building looks absolutely inevitable.

Mr. Goodhue rejoiceth in his heart when he gets hold of a subject on the junction of two streets, and he very often has them — so often, in fact, that we almost suspect that he anticipates the street commissioners. However that may be, given those conditions, he puts them to a most charming use. He will place one of the streets in sharp perspective, usually in the very eye of the vanishing point, and then follow it away into the landscape for a great distance, thus proposing to himself as fascinating a study in drawing as the illustrator could possibly meet with. It is a bold and difficult performance withal. Not many men would venture on it, and fewer still would we advise to try it. Mr. Goodhue can do it in a masterly way, still maintaining the breadth and scale of his drawing. The unusually small scale of his technique permits him to treat the landscape more intimately than it is done generally in architects' drawings. The picturesque character of his subjects, moreover, makes them easily reconcilable to such a treatment; so that he doesn't persuade nature into a straight jacket to bring it in sympathy with his building, but rather reverses the process. "Figures," however, seem to be the same *bêtes noires* for Mr. Goodhue that they are to architectural men generally. Fortunately he has a keen sense of humor and generally lets people alone. When they do appear they look uncomfortable, as though they were conscious that he was using them for the menial office of giving scale to his building; and we have a notion that he swears a little over them. After all, figures are too often used in our drawings meretriciously, and it is a great deal to say that Mr. Goodhue can make his pictures sufficiently interesting without any.

His technique exhibits very decidedly the influence of Herbert Railton, who,



strangely enough, hasn't influenced perceptibly any American illustrator beside, although he has many imitators among his countrymen. Most of them, however, seem content enough to merely mimic him. Goodhue doesn't have to cast reflections on the constructive ability of his firm to make his pictures interesting, so his line shows none of the interesting corrugations in which Railton indulges to express

reproductions, at slightly reduced scale, of the remarkable series of drawings of an imaginary mediæval town in Bohemia which Mr. Goodhue has playfully named Traumburg, and which he entertainingly describes in a charming article accompanying the drawings. These drawings show him at his best, both as an illustrator and as an architectural designer. The conception is a remarkably clever one, and the draw-



corners eaten away. The buildings in Mr. Goodhue's pictures are new buildings, and the walls are perfectly plumb and true according to specifications. We hope we may live to see the days when one may sketch them with corrugated lines, but as it is we prefer the way Mr. Goodhue does them. He respects their youth.

The readers of *The Architectural Review* are already familiar with the

ings, of which only we have room to speak, are so delicately beautiful that it seems impossible that Railton himself could better them. For ourselves we don't believe he could. The sketches are very small and the scale of the technique is all but microscopic.

Mr. Goodhue may safely rest his reputation as an illustrator on the Traumburg drawings.

CHARLES D. MAGINNIS.



LXIII.

Wall Decoration Chambre de Catherine de Medici, Chateau Blois.



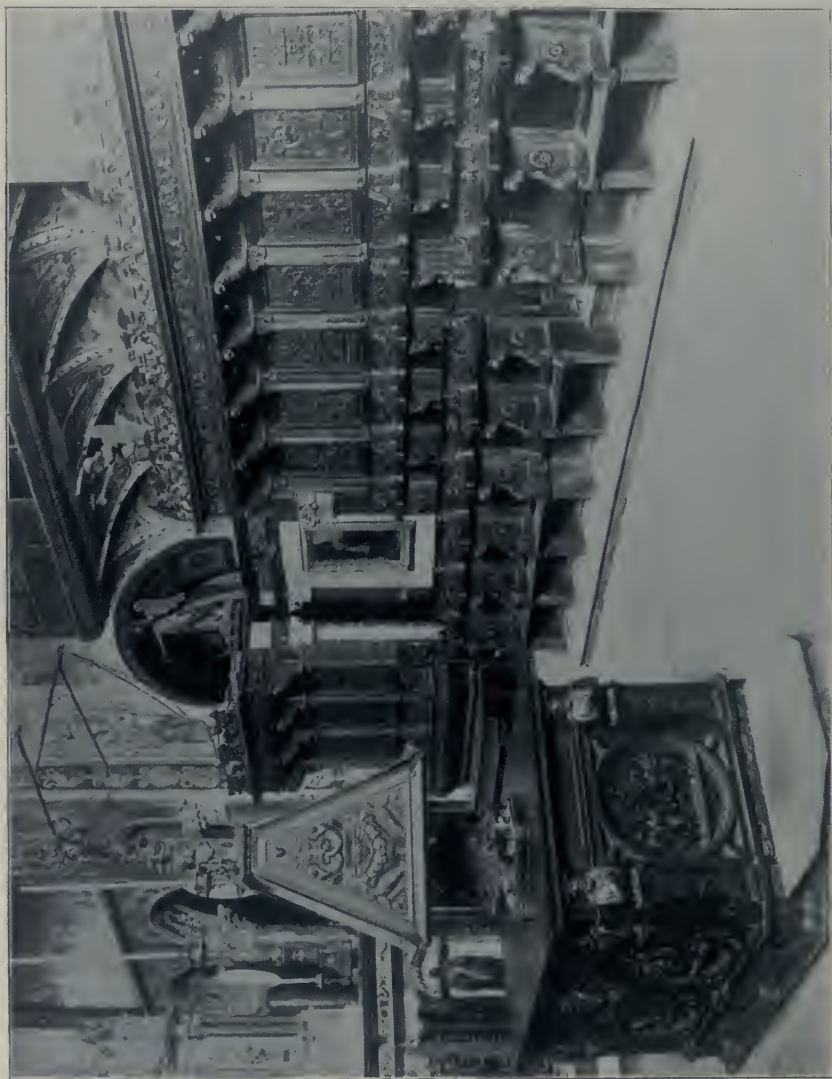
(REPRINTED FROM *The Architectural Review*.)



LXIV.

Wall Decoration, Chateau Blois.





# THE BROCHURE SERIES

## OF ARCHITECTURAL ILLUSTRATION.

VOL. III.

SEPTEMBER, 1897.

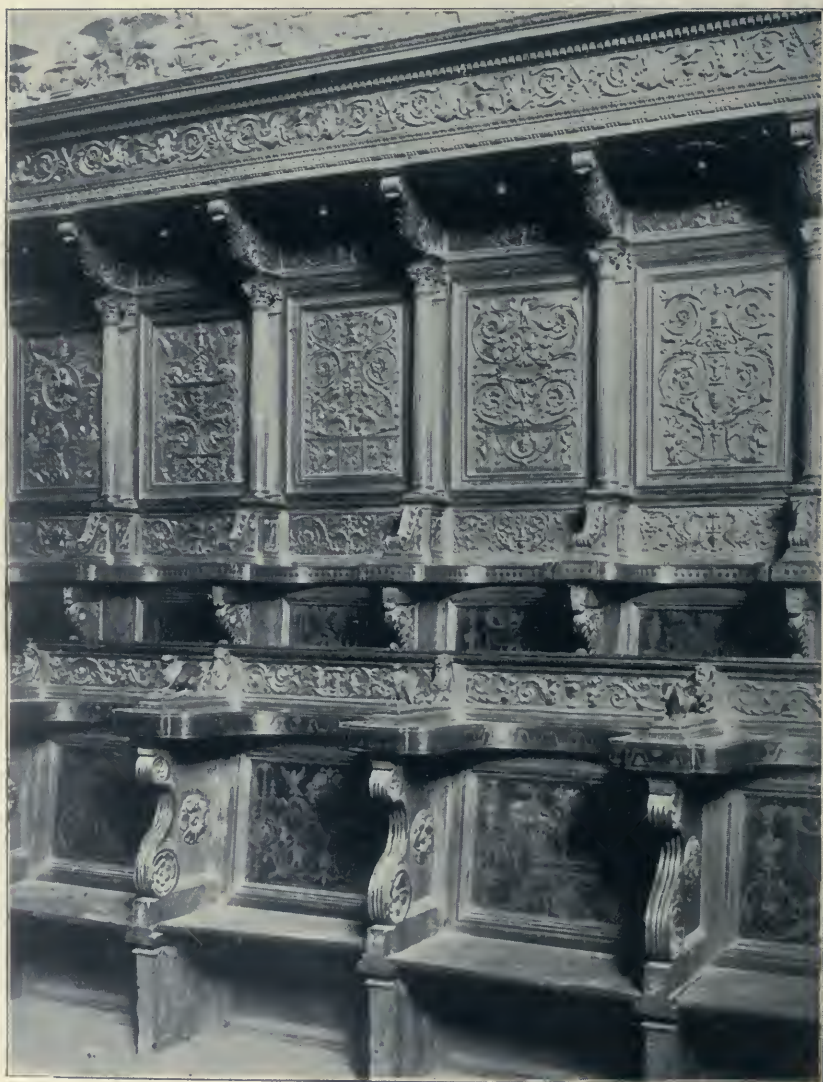
No. 9.

### THE CARVED CHOIR-STALLS OF PERUGIA.\*

CROWNING a hill-top, moated by the Tiber, surrounded by the fertile Umbrian plain where the sailing cloud-shadows darken the gray-green of the olives, and encircled and guarded by a surrounding wall of Appenines, the ancient city of Perugia lies dreaming. It is as if, spent and exhausted by the fierce and turbulent rule of the Baglioni, she had, with the death of the last of the family, fallen asleep like the enchanted Princess in the fairy-tale; and through the guarding circle of those disconsolate hills, the Prince of the nineteenth century has not yet penetrated to kiss, and wake her into modern life. Passing under her gate, which still bears the Roman inscription of "AVGVSTA PERVSIÀ," the visitor leaves behind him the progress of four hundred years. The mediæval walls, and within them the still discernible circle of the older Roman walls, surround him; across the narrow, over-arched and tortuous streets the shopkeepers still cry obsequious greetings to him, as they may have cried to the kinsmen of Maltesta; the very dress of the inhabitants recalls the painted draperies of Perugino.

His name, Perugino, is the first which comes to the lips in speaking of this city of the past. It is to her adopted son, Pietro Vannucci, that this once proud Perugia, so rich in her own history, who rivalled Florence, set herself above Siena, and even dared to defy the very Pope in Rome, owes her present fame—the name which she bestowed upon him is more familiar than her own. Of his paintings with which she was once adorned, Rome, Paris and London have robbed her; but if there are better Peruginos elsewhere than at Perugia, there is nowhere better to appreciate them. Every window that opens on the thinly-timbered Umbrian valley shows a background by Perugino; and the calm and stolid face of every Umbrian peasant recalls the placid countenances of his saints. Indeed, to the irreverent traveller, there seems at times to be a surfeit of Perugino in Perugia. He cannot look up at a fantastic gargoyle, nor even pick up an odd shaped pebble from the street, without a hint from the *cicerone* at his elbow—every man, woman and child in Perugia is a *cicerone*—that it was designed by "the master;" until he comes to feel as Mark Twain did in Rome, when he told his guide to "lump the whole

\* A similar set of these stall-carvings was illustrated in Volume I., Number 6 of THE BROCHURE SERIES.



LXVI.

Carved Choir-Stalls, Church of San Pietro, Perugia, Italy.

thing, and say that the Creator made Italy from designs by Michael Angelo."

It is, however, neither with Perugia nor Perugino that we have to deal, but with the carved choir-stalls in the little church of San Pietro de' Casinense.

This church, formerly a Benedictine monastery, stands on a spur at the eastern end of the city, whence, through a gap in the Appenines, Perugia may glance at her elder sister, Assisi. Its low and striking clock-tower is visible from all parts of the city. It is basilicon in form, and probably dates from the fourth century. Its Gothic choir was added, perhaps, in the fourteenth. The nave is thirty-six feet wide; the aisles are vaulted into square bays, and divided from the nave by two rows of antique Ionic columns of red granite and gray marble,—stolen from somewhere and rearranged to fit—which carry arches. The transept does not project beyond the aisle walls, and there is a square groined vault over the crossing, and a polygonal apse, also groined. At the west end of the church is a square cloister with vaulted arches borne on Tuscan columns. The flat, coffered ceiling of the nave was added in 1853 by Benedetto d'Montepulciano, and its walls are covered with paintings by Aliense. The glory of San Pietro is, however, in five exquisite half-length figures by Perugino (you see it is impossible to escape him), which have not been removed.

The carvings of the walnut choir-stalls, which are here illustrated, were the work of a mysterious personage of whom we know no more than his name, Stefano da Bergamo; and were finished (with the exception of some additions, which are inscribed with the cypher, "S.D.A.S." and the date 1556), in 1536. The designs for them are, to be sure, attributed to Raphael (it is a miracle that they were not attributed to Perugino) but there is no valid warrant for this; and indeed, at the time of their undertaking Raphael had already been obliged, from the multitude of his commissions, to almost entirely give over to his pupils a far more important work, the decoration of the loggia of the Vatican. The Raphaelesque motives employed in these panels may

have suggested his authorship, but they are, by the very confusion of their reminiscent quality, witnesses against it.

Nevertheless, they are excellent and striking examples of late Renaissance use of ornament. The carving "covers" the surface so admirably, that, looked at from a distance, it presents the appearance of even enrichment; the broad and vigorous curves are left free from the chisel, and even the tool marks on the background have a distinct æsthetic value.

In his essay on "The Growth of Conscience in Modern Decorative Art," Mr. Van Brunt has given so interesting a summary of the way in which the artists of successive ages would have decorated such panels as these of Perugia, and followed the summary with so instructive a conclusion, that we cannot do better than to quote it here.

"An Egyptian," he writes, "would have formulated his work according to his religion, and filled his panel with a vertical composition of reeds and lotus flowers, dead with straightness, rigid, precise, hieratic. A Greek would have contented himself with a wild honey-suckle, but would have extracted from it the very essence of beauty, grave, sweet, corrected and chastened to the last limit of refined expression. A Roman would have chosen the acanthus and the olive, and would have given to them exuberance, vigor, sensuousness, abundance of life and motion, pride and vain-glory. A monastic designer of the twelfth century, taking up the dim traditions of the ornamentation of the later Roman Empire, would have conventionalized the common leaves and flowers of the wayside, and forced them to grow with formal symmetry within the boundaries of the panel. A lay architect of the fourteenth century would have given a consummate image of what such leaves and flowers should be if they had been created for the sake of his panel; their shapes and their motions would have been adjusted to the form of his panel, conventionalized and crowded. A century later, he would have crumpled, twisted and undercut the leaves with dangerous



LXVII.

Panel of Choir-Stall, Church of San Pietro, Perugia, Italy.

perfection of craftsmanship, and they would have wandered wanton outside the limits of the panel; strange animals would have been seen chasing one another among the leafage. An architect of the Renaissance would have remembered the Roman work; but the Roman acanthus and olive, under his hands, would have been quickened and refined with new detail, new motion, finer inspiration and invention. They would have received a new impulse of life, a new creation, a finer and more delicate spirit. But the art would still have been pagan art; not exuberant and ostentatious, but subdued to a strict relationship with the borders of the panel, observant of the centre line, illustrated with conceits of vases, medallions, birds, masks, animals, boys, garlands and pendants, all obedient to laws of absolute symmetry. For it was the era of the Renaissance of learning, the era of *concetti* in literature as well as art. The decorator of the Elizabethan era would have frankly left nature, and covered his panel with armorial bearings and grotesque emblazonments, with accessories of strapwork curled and slashed capriciously. The Saracen would have filled it with Arabesque tangles and pious texts. The Japanese, following immemorial traditions of art, perfected by successive generations working loyally, consummate interpreters of natural forms, would have disregarded any considerations of symmetry, and projected into the field of the panel a spray of natural leafage from some accidental point in the boundary, cutting across a background of irregular horizontal or zigzag bars; a quick flight of birds would stretch their wings across the disk of a white moon, or a stork would stand contemplative upon one leg in the midst of his water reeds, with the sacred Fusi-yama in the distance, barred with its conventional clouds; and yet the composition would be suited to no other shape or size than that of the panel for which it was composed.

"In the presence of all these crowding images, the modern designer stands asking, 'Which shall I choose, what shall I reject, and why?' They are all

his; they are his rightful inheritance, the legitimate language of his art. He not only has all the beautiful things in nature at his command, but he also knows how they have been used by his predecessors; how they have been interpreted and transformed in the service of humanity; how they have been sanctified by old religions, conventionalized and revitalized according to the knowledge, the inspiration, the needs, the opportunities, the emotions of mankind. They have become an expression of humanity, and thus, as we have said, a language of art."

LXV., LXVI.

CARVED CHOIR-STALLS, CHURCH OF SAN PIETRO,  
PERUGIA, ITALY.

LXVII. TO LXXII.

PANELS FROM THE CHOIR-STALLS, CHURCH OF  
SAN PIETRO, PERUGIA, ITALY.

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Number VII. (Volume V.), of *The Architectural Review*, which is now in press, will contain an exceptionally large amount of text matter and text illustrations. The two leading articles are by Mr. Henry Rutgers Marshall and Mr. R. A. Cram. Mr. Marshall writes of "Architects' Tools," condemning the present fashion of making elaborate drawings of elevations, etc., especially the system of the Ecole des Beaux-Arts, and describing the preferable method of working from a model. Cuts of Mr. Marshall's models illustrate the article.

Mr. Cram deals with a subject on which he is an authority, "Church-Interior Decoration." He speaks from the practical as well as from the æsthetic side, and photographs of American and European church-interiors accompany the text.

The principal plates in this number are of Messrs. Howard & Cauldwell's competition design for the Providence, R.I., Armory, and of the new Syracuse Bank Building, Messrs. Benson & Brockway, architects.

Number VIII., the last number of the Volume, is to contain, among other articles, a scholarly review of the year's progress and general trend in American architecture by Mr. Rob't D. Andrews.



LXVIII.

Panel of Choir-Stall, Church of San Pietro, Perugia, Italy.

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## New Series of Brochure Competitions.

### COMPETITION "A."

On the 15th of November the packages containing the designs offered for this competition will be opened, and the judges will make their award. They will also briefly criticise both the winning design and the best of the others, and these criticisms will be printed in the December number of THE BROCHURE SERIES.

### Club Notes.

At the annual meeting of the Chicago Architectural Club, held at their rooms in the Art Institute, the following officers were elected for the ensuing year:

President, Mr. Edward G. Garden;  
 Vice-Presidents, Messrs. Frank Kirkpatrick and William C. Eggebrecht;  
 Secretary, Mr. N. Max Dunning;  
 Treasurer, Mr. Joseph C. Llewellyn;  
 Executive Committee, Messrs. August C. Wilmanns and Frank Upman.

The month has been an unusually busy one in the Atelier Masqueray. In the first Atelier competition of the season the program concerned the arrangement of a dining-room, billiard room and conservatory. Eleven men

submitted drawings and some of the designs were very successful. The awards in this competition were as follows:

First mention, Wm. T. L. Armstrong; second mentions, Leonard Schultze, Benj. W. Levitansky, Lester A. Cramer; third mentions, S. Lewis Goodwin, A. F. Buys.

The attendance at Opening Night of the Baltimore Architectural Club, held at the Club's rooms on the 14th of October, was unusually large,—a result not entirely due, we hope, to the word "refreshments" which appeared prominently on the announcement-card. During the evening the president read a program for the coming year which included announcements of talks on Practical Subjects, lectures on Graphic Analysis, the formation of a class in water-color rendering, and competitions at stated intervals.

The officers of the Club are Wm. W. Emmart, President; Wm. G. Nölting, Vice-President; Raymond P. Allen, Secretary and Treasurer. Board of Control: George Worthington, Wm. M. Ellicott, Jr., J. B. Noël Wyatt, Louis A. Simon.

The T-Square Club of Philadelphia has just issued a very attractive Syllabus of the programme for its fifteenth season. In the introductory pages the work of the present year since May is reviewed, and this summary shows that several important steps have been taken. A Charter has been granted to the Club, a new Constitution and set of By-Laws have been adopted, and—perhaps most important of all to the Club's well-being—a house has been secured and altered to suit its purposes. When it is remembered that the prime mover in achieving these important advances has been Mr. Boyd, it will be evident that the T-Square has been fortunate in its president. The main part of the syllabus is devoted to synopses of future competitions, at which Messrs. F. Cresson Schell, Wilson Eyre, Jr., Walter Cope, Edgar V. Seeler, Frank Miles Day and Louis C. Hickman will act as critics.



LXIX.

Panel of Choir-Stall, Church of San Pietro, Perugia, Italy.

## Harvey Ellis.

"What's become of Waring  
Since he gave us all the slip?"

BROWNING.

To most of those who read these pages Harvey Ellis is known, if he is known at all, as an architect of ability, a designer of original invention, and a pen and ink draughtsman of great individuality and power. To artists studious not of reputations but of talents, he is known, no less, as a painter of hauntingly beautiful pictures. Among a narrower circle he is a teacher and critic, with peculiar, unconventional views; an advocate of unusual methods. To the few who are interested in such



things, he is an authority, one of the highest, on the subject of Japanese color prints. To some he is known as a writer and musical critic, while others perhaps remember him as an etcher, or as a designer of stained glass. Among his intimates he is at all times the best of companions, in every gathering the wittiest and wisest—and so on down to the newsboy at the Four Corners, to whom he doubtless appears a kind-eyed, quiet-mannered gentleman, with a military bearing, who buys his paper with commendable regularity.

To his friends he is so much more than all of these things that they are remembered only with an effort. Be-

hind this manifold personality is a fine and rare intelligence linked to a nature simple and lovable as a child's.

Harvey Ellis was born in Rochester, N.Y., in 1852. He received the somewhat unusual advantage of an education at West Point; and thereafter studied architecture in the office of Arthur Gilman in New York, and painting under Edwin White of Albany. In partnership with his brother Charles he practiced architecture in Rochester until, in 1885, he went West. During the next few years, working as a draughtsman in various offices, he revealed talents as a designer so distinguished that his progress from place to place could be traced by the altered character of the work produced by the architects who employed him. His ability won instant recognition, and the peculiarities of his style were widely copied. After ten years of this nomadic life,—years during which he had contrived to make other men's fortunes and his own reputation,—he returned to Rochester, resumed the partnership with his brother, and he is now again engaged in the practice of his profession in his native city, and is doing, let it be added, the very best work of his life.

Concerning the drawings of his in pen and ink published in various architectural journals, by which he is most widely known, there can be but one opinion. They show him to be a consummate master of this most difficult medium. His style is strongly individual; his line is at once firm and delicate. In the simplest and most straightforward manner he obtains effects of surpassing richness and reality.

Of the buildings of which these drawings are, for the most part, representations, praise must be more qualified. They are all very original; some cannot fail of being highly successful. Many fall just short of complete success on account of some ill-considered feature or detail. Others must be frankly failures, though interesting failures. They are too fanciful, too exuberant; the elevation, fine in itself, is often not the logical outgrowth from the plan,—the right letters, as it were, have been made to spell the wrong word.



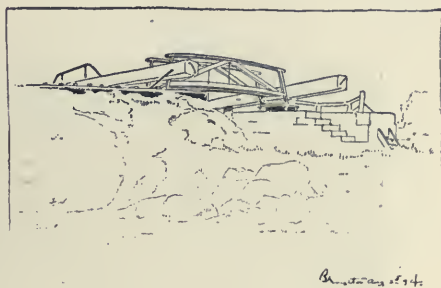
LXX.

Panel of Choir-Stall, Church of San Pietro, Perugia, Italy.

It is first of all as a colorist, and afterwards as a draughtsman, that Harvey Ellis is almost unfailingly right. Endowed by nature with a wonderfully subtle color-sense, his life has been spent in cultivating and refining it by the study of nature, and of the works of the little-known great masters of Japanese color-printing. His method of handling water-color is unusual and interesting. First he makes a charcoal drawing, in which all of the values are carefully established, and great attention is paid to rhythm of line and to *notan*, that is, balance of light and dark spaces. He broods long over his work in its first stages. Some one asked how he was progressing with a certain picture. "Oh," he replied, "I'm just going over it and loving it." When he has settled upon every detail he transfers the outline to Whatman's

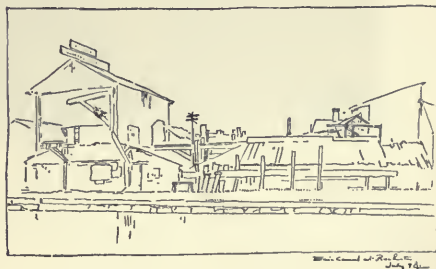


Italian. The daylight in them is a dream daylight. They present nature as she appears seen through a nature, instead of as through a lense. Their art



is, to a certain extent, conventional and decorative, rather than realistic. Some would call it decadent. It has, at least, this quality in common with Decadent Art, so called, that it is burdened with a thousand meanings so subtle that only the artist himself knows, or can know, them all. To the beholder they appear only vaguely and fitfully, like jewels cast into the sea. This elusive, haunting quality is either a source of irritation or delight. It is music, or it is only a noise.

Since his return to Rochester, Mr. Ellis has been engaged in a very interesting and successful experiment. It may be described as an attempt to inculcate in the minds of a few receptive young people, the principles which underlie all strictly decorative art, and more especially Japanese art, and to induce them to work according to such principles. He teaches them, first of



all, to see, and then to represent things in their permanent, rather than their ephemeral aspects; to seek always the

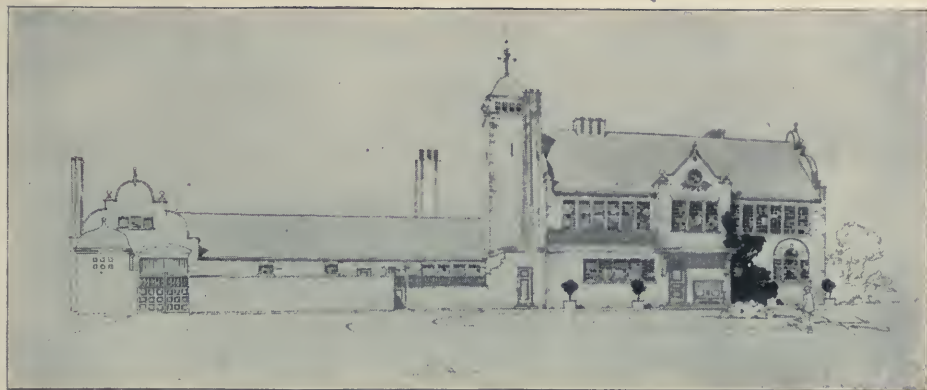
paper, in indelible brown ink. Next, with a sponge, he destroys the surface and obliterates the grain of the paper. He more often obtains his colors by superimposing one upon another, than by mixing them first upon the palette. The whole is sponged from time to time, not to correct mistakes, but in order to carry a little of each color into every other. The finished result is wonderfully rich, suave, low-toned and harmonious.

His pictures are not of the kind which would appeal to buyers of *Munsey's Magazine*, for they are never photographic, and rarely tell a story. If you like Hokusai and Hiroshige, if Botticelli and Fra Angelico charm you, you will like them, though they are as little Japanese as they are early



LXXI.

Panel of Choir-Stall, Church of San Pietro, Perugia, Italy.



most direct and synthetic method; to compose symmetrically and harmoniously, instead of at haphazard, and a thousand other things of which most art students remain forever in ignorance, or teach themselves only after years of failure. His pupils, following his instruction, are able, with such simple and familiar objects as a brush and comb, for example, to form decorative devices which would not discredit a Japanese. When they are sure of their values in black and white, he permits the use of a few colors. Anatomy and kindred subjects are not ignored, and out-door sketching forms an important part of the curriculum. Many of these studies from nature, while entirely true to the scene depicted, possess, in addition, the admirable qualities of Japanese prints.

That Harvey Ellis is even more remarkable as a man than as an artist, no one who has ever known him will deny. He possesses the power of inspiring people, and especially young people, with his beliefs and enthusiasms, and of spurring them into achieving things which he himself, with an infinitely finer endowment, falls just short of achieving. His interest in life is even greater than his interest in art; and while others halt and render their elusive ideal actual, he presses onward toward a new ideal, like a child who deserts its doll to chase a butterfly. He has opinions on every subject under the sun, and formulates them in very characteristic language. He believes, for example:

That chairs were made to sit in.

That cigarette smoking aids digestion.

That art is long and artists are usually short.

That a man should go sketching with his hands in his pockets.

That all art is decorative, and a picture is not good unless it looks equally well upside down.

That there are the Greeks, the early Italians and the Japanese, and the greatest of these are the Japanese.

That in Raphael, the glory of the Renaissance, instead of arriving, departed.

That the Monadnock is a better building than the Paris Opera.

That Romanesque and rock-faced ashlar are not synonymous terms.

That Americans are so fond of nature that they would use the Palisades for advertising purposes, and replace the sea beach with best Rosendale cement.

That minds are either Gothic or Latin; and that some men could find a symbol of the Trinity in the angle of a rail fence, while others would criticise the detail of the Great White Throne itself.

That the old Boston State House is no more what it is cracked up to be than a monkey is a hand-organ.

That devout Bostonians cross themselves and breathe a prayer when the name of Bulfinch is mentioned, yet if he were among them today they would stone him to death—in the newspapers.

CLAUDE FAYETTE BRAGDON.



LXXII.

Panel of Choir-Stall, Church of San Pietro, Perugia, Italy.





LXXIII.

Great Staircase, Blois.

# THE BROCHURE SERIES

## OF ARCHITECTURAL ILLUSTRATION.

VOL. III.

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No. 10.

### THE GREAT STAIRCASE, CHATEAU OF BLOIS.

IT is possible to realize at the Chateau of Blois even more keenly than elsewhere, the full spirit and movement of the true Renaissance, where such a gem of art and architecture as the wing of Francis I. is placed next to the cold and meaningless productions of François Mansard at the height of his reputation, at the most chilling point of his respectability. In this wing, so different from all the rest of the Chateau, lived Gaston d'Orleans, dullest of royal dullards, himself so chillingly respectable that he had formed the plan of delivering up the whole of the palace to the mercies of the reforming Mansard, and would have done so, had not Providence removed him in time, and preserved for the wonder of later ages the fantasies of a creation too unfettered for his slow wit to understand.

The attention of the visitor who first enters the Court of Honor of the Chateau through the Louis XII. door, is at once attracted and enchained by that masterpiece of Renaissance architecture, the Great Staircase. Seen through this doorway, whose low arch serves as a sombre frame to accentuate its dazzling whiteness, it seems less a solid and palpable creation of man's handiwork than a fantasy from the brush of some great scene painter; and the visitor almost hesitates to approach lest he brush against the canvas.

When Charles the Fifth first saw the newly finished spire of the Cathedral of Anvers, he declared that it was so delicate and precious that it might better be enclosed in a casket than to stand exposed to the rude airs of heaven; and if, as some historians say, he stopped at Blois in 1539, he might well have said the same of this staircase, which possesses the same flowery abundance, the same fine arabesques, the same intricate and lacelike carving, till it seems, in truth, less like sculptured stone than cunning jewellers' work.

From the splendid façade of Francis I. juts out a five-sided, projecting, hollow tower, whose four great free-standing buttress piers, which rise from ground to cornice, encase a stone spiral. The vertical mass of these piers is divided into two sections by horizontal mouldings, marking the line of the third story floor; they are furnished with bases and sculptured capitals; in a niche upon the lower part of the face of each of these piers stands the statue of a female figure upon a corbel and under a pinnacled canopy. All these features are set upon lines parallel with the cornice and the base: with these the horizontal elements of the design cease. Every other feature ramps with the gentle ascent of the stairs thus encased. The coping of the staircase, which within them winds its ascending spiral,



LXXIV.  
Great Staircase, Blois, Entrance.

marks by its intersections, four superimposed stories of trapezoid form. Those on the ground level give access to the stairway; the others in tiers above the first, are railed in by rich balustrades. The ornament of these balustrades is composed in the first tier of simple spindles, and in the succeeding stories of the salamander and the crowned "F" of Francis I. Applied to the piers, at heights nicely calculated that the eye might appreciate all their details, are the garnished niches and statues before mentioned. Although they have been for three hundred years out of doors, these statues still preserve the clear firm touch of their unknown sculptor's chisel, and there is little doubt that they are either some of the first work of the celebrated Jean Goujon in his youth, or are the productions of that school by which he was first and most directly influenced. The date of Goujon's best work is later than the time at which the wing of Francis I. was built; yet so elaborate a piece of architecture as this staircase may very well have remained without the statues that completed it until long after all the surroundings had been finished.

Goujon was born in 1520, and it is quite possible that while still a simple mason under old Maître Quesnel, and before the work with Pierre Lescot at St. Germain l'Auxerrois had made him famous, the young artist chiselled these figures, or at least the one on the right hand of the entrance, which particularly recalls various mannerisms in the works that are recognized as his.

The carving of the canopies of these statues is alone worthy of long study. Though every detail varies, yet each contributes gracefully to the perfection of the whole, and here especially it is possible to realize what a labor of love was the work of the old masons; what unlimited time their workmen had to chisel cunningly at the firm white stone beneath the mellow sunshine of Touraine, until each part was filled with something of the individuality of the man whose life was spent in slow and perfect labor with his hands; until the scheme which gave each workman his allotted task was finished in its harmony

of carving, its strength and delicacy of construction and of form.

From the bases of the piers to the niches in which these statues are set, wind graceful arabesques, as if to gradually prepare the eye for the magnificence which it is to encounter above, and other arabesques ornament the slender colonettes which enmesh the winding stair.

The staircase seems at first to stand free of the façade, breaking the even succession of small columns and their perpendicular descent with the bold projection of its octagonal lines; but above it is embraced and caught into the whole mass by the broad crowning cornice, which gathers within its strengthening bands every various curve. Here is the power and accentuation of the cornice entirely justified; nothing less would have been sufficient; and thus this feature of the façade which might have challenged criticism under other circumstances seems to be quite condoned. The sculptured dormers fret along its edge, searching the air with their pointed tongues, and twice the carved cases of the chimney stacks break aloft through the roof like towers, but the cornice keeps firm hold upon their bases.

Above the cornice this unprecedented composition finishes with an attic order bearing a decorated entablature, of which the vertical elements are strongly marked, and a balustrade. It is here that the art of the Renaissance speaks its *dernier mot*, concentrates, and exhausts all its riches. Here the architect has heaped up and reproduced with a prodigality which does not, however, preclude harmony, all the motives employed in the lower portions; and the eye, which has arrived at this height after a survey of increasing splendors, rests astounded, and fascinated by the numberless resources and the infinite delicacy of the sculpture, which is comparable only to some exquisitely worked bit of Chinese ivory.

Such is the exterior of this beautiful staircase. The façade which frames it, the gallery which crowns the façade, the dormer windows surmounted by niches which are seen behind this gallery, and within which are set



LXXV.

Great Staircase, Blois, Detail.

charming figurines of children, — all these fine and ingenious details seem, despite their importance, to be merely accessory.

“But the wonders of this perfect structure do not cease with its outward walls. Within the stairs wind upwards, folding around their central shaft as the petals of a tulip fold one within another, and by a slight curve at the attachment of each step a strange look of life and growth is produced that is marvellously helped by the ascending spiral of the column which supports the whole; its waving lines rush upwards like a flame blown from beneath, or like the flying spiral of a jet of water falling fast yet strongly from a height; there is in it a beauty that is elemental, a touch of that same nature that curves the tall shaft of the iris upwards from the pool in which it grows. But the delicate strength of this central column reproduces with an even greater accuracy the lines that in natural objects are most beautiful because most adapted to the purpose they fulfil; the spiral upon its shaft is the exact curve which is contained within a seashell, for the beauty of the work is of that necessary order which comes of perfect skill, and finds its ultimate justification in the essential harmony of natural structures. In this particular case it seems more than probable that an actual shell was consciously used as a model; for the absolutely unique double curve of the steps, with their relation to the ascending curves from which they grow, is precisely the same as the spiral and its attachments in the shell. There is a more striking correspondence still: the lines upon the outside of the top part of the shell will be found to have the same arrangement as the balustrades on the exterior of the staircase, and are reversed in exactly the same way as the spiral. It is tempting to complete the hypothesis by imagining such a shell to have been in the possession of the architect to whom the first plans of the work were due; he must have been a man who collected natural objects to study the secrets of their beauty; a man of unequalled constructive power, for the groinwork and vaulting of the stairs is not the least

astounding part of the whole building; a man, too, of extraordinary imagination, and with a sense of harmonious proportion rarely equalled in the world. Scarcely any one of the time save Leonardo da Vinci possessed a genius at once so universal and so thorough, and Leonardo was at Amboise, a little farther down the river, just when the first plans of this staircase would have been required. Is it possible that Francis found one last sketch, one remnant of the dying artist's genius, and employed to decorate his newest château, the last *tour de force* of the great master for whom he had no care to build a tomb?”

No château better demonstrates than Blois the result which the architects of the Renaissance knew how to draw from that thankless and, in our modern buildings, too often graceless necessary, the staircase. Whether these long stone spirals were shut into turrets which suddenly jutted from the angles of their buildings or sprung directly from the ground, whether they rose outside the building, as at Blois, or, as at Chambord, constituted the core and axis of the edifice, they are always treated *con amore*, and become, under their hands, not obstacles, but very triumphs of art.

LXXIII.

GREAT STAIRCASE, BLOIS.

LXXIV.

GREAT STAIRCASE, BLOIS, ENTRANCE.

LXXV.

GREAT STAIRCASE, BLOIS, DETAIL.

LXXVI.

GREAT STAIRCASE, BLOIS, DETAIL.

LXXVII.

GREAT STAIRCASE, BLOIS, UPPER PORTION.

LXXVIII.

GREAT STAIRCASE, BLOIS, INTERIOR.

LXXIX.

GREAT STAIRCASE, BLOIS, CENTRAL PIER, DETAIL.

LXXX.

GREAT STAIRCASE, BLOIS, CEILING.



LXXVI.

Great Staircase, Blois, Detail.

# The Brochure Series

## of Architectural Illustration.

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The November issue of THE BROCHURE SERIES will differ from the other numbers of the volume, but will differ in a fashion with which, we imagine, few of our readers will be disposed to cavil. It is to be a "Special Library Number," containing at least three times the customary quota of pages, and more than twenty-four full-page engravings of representative European and American library buildings and interiors. To the text of this number Mr. William E. Foster of the Providence, R.I., library, who has made a special study of library planning, will contribute an eminently practical and valuable article dealing with this subject from the librarian's point of view; and Mr. Russell Sturgis will write of libraries in general.

The existent literature on library construction is very meagre, and we are confident that this number of THE BROCHURE will be one which, in the language of the advertisements, no architect "can afford to be without." The price of single copies of this special issue will be ten cents.

Of particular interest to draughtsmen will be an article contributed to the forthcoming Number 8 (Volume IV.) of the *Architectural Review*. It is by Mr. Otto Heinigke, and deals with the designing of stained-glass windows. The illustrations show mediæval windows in comparison with the most advanced work of modern glass-makers.

## Claude Fayette Bragdon.

It has been recently said of Walter Pater, by a discriminating critic, that he "was a man whose fineness and subtilty of emotion were united with an exact and profound scholarship; in whom a personality, singularly unconventional and singularly full of charm, found for its expression an absolutely personal and an absolutely novel style. The man and his style, to those who knew him, were identical; for his style was, unlike that of other men, concentrated upon a kind of perfection which for the most part they could not even distinguish, and he was the most lovable of men to those who rightly apprehended him; the most fascinating, the most generous and helpful of private friends."

With equal propriety and equal force these words may be applied to the subject of this brief, and of necessity, inadequate appreciation.

It is no easy task to classify and analyze Mr. Bragdon's productions, for while his mind is conspicuous for its clearness and sanity, its comprehensiveness is to the average man a source of bewilderment, for its range is apparently without limit. It is as if an early





LXXVII.

Great Staircase, Blois, Upper Portion.

Florentine, a latter day Frenchman and a Japanese of the last century were by some occult process fused into one personality. If he is studied as a maker of pictorial decorations it is obvious that he is easily in the front rank of the small band of men who are creating for us a national art.

We who have saved them (and who has not?) know the unfailing delight caused by the study of his extremely individual drawings in the *Chap Book* and kindred publications. These delightful works are of the utmost value, and to those who give them intelligent consideration, veritable sermons. Each of them is studied with an appreciation of fundamental art principles and an adjustment of means to end that mark him a consummate artist.

These little masterpieces have a breadth of execution, a purity of line and a resourcefulness of composition that put to shame larger and more pretentious efforts by men whose names are words to conjure with.

Equally brilliant have been his ventures in the poster field, and no appreciative amateur is without his compositions for the *Chap Book*, the *Post Express*



or the "Märtian" poster recently issued by the Harpers.

As well known and equally good are the book covers and title-pages of which he has produced a large number, and which for uniform excellence, careful consideration of spaces and a just proportion of type and decoration to the page, are quite comparable to the great Venetian printing of the early Renaissance. This is evidenced in numerous *Chap Book* covers, those for the Rochester Society of Arts and Crafts Catalogues, (of which society, by the by, he is one of the organizers, officers and guiding spirits,) and many others, including some now in press for Harpers Bros. To be included with the foregoing is the cover to the well known "Minor Italian Palaces," a collection of measured drawings and sketches, the result of six months' professional study in Italy.

Another result of this sojourn was the remarkably well written series of articles which saw light in the *American Architect*, as well also as a number of short stories, essays, etc., that were published in the *Bachelor of Arts* and in other magazines, all showing a literary talent as rare as it is fine.

Nor is this faculty confined to prose, for there are found from time to time, thoughts from his pen, always of a lofty nature, conveyed in verse that is conspicuous for its clarity and genuine poetic excellence.

Then, as if these varied "side issues," so to speak, were not enough for a busy professional man, this many-sided genius finds time to divert himself with pyrography, and his results are sufficiently attractive to cause one less gifted to adopt the artistic burning of wood as a life work.

Of his architectural drawings it is almost unnecessary to speak: always

## STORIES from the Chap-Book

BEING A MISCELLANY OF  
Curious and interesting Tales,  
Histories, &c; newly com-  
posed by MANY CELE-  
BRATED WRITERS  
and very delight-  
ful to read.



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1896



LXXVIII.

Great Staircase, Blois, Interior.

brilliant and illuminating, personal, accurate and authoritative, possessing a splendid synthesis of line; texture suggested with an economy of means that is exasperating, and all combined with a sense of reserved power that makes them inimitable. The more they are studied the more obvious it becomes that they are an expression of the man himself, for they betray absolutely no influence save that which comes from his own inner consciousness. Imagine then, if you can, all of these varied attainments concentrated in a tall, slim, well set-up young man of much personal attraction, and you

# MINSTRELS



**LYCEUM THEATRE MAR**  
**22ND AND 23RD MATINEE**  
**TUESDAY.**

have a fair working knowledge of Bragdon.

A model of deportment, of a character absolutely without blemish, he is modest and unaffected, reserved, quiet and difficult of access, yet when well known one of the most lovable of men, as well as one of the purest minded; and in the cosy corner from which he charms in the Vagabond Club are always to be found the little band of admiring friends and disciples, listening for the never-wanting epigram or the clarifying sentence that solves the problem under discussion, be it Schopenhauer's place among the philosophers, parlor-magic, the color in the works of Tieapelo, or the acceptability of the atomic theory; for all are his familiars, and even when

he mounts his vegetarian hobby and proclaims spinach as one of the greatest gifts to man, there is no murmur even from the brutalized eaters of the soul-destroying cooked meats, so thoroughly imbued are they with the notion that to take issue with Bragdon is to proclaim one's self deficient in mental acumen.

For the few who are not acquainted with the chronology of his life, it is sufficient to say that Claude Fayette Bragdon is the son of George C. Bragdon, the well known poet and writer. He was born at Oberlin, Ohio, thirty-one years ago; and, at an age too early to acquire an appetite for office, he was removed to New York State, where, in an artistic and literary environment, he lived the life of a healthy, normal boy, and after acquiring a carefully planned education, cast about him for a vent for his artistic inclinations. During his leisure hours he had acquired a fair knowledge of wood-engraving, then at the height of its excellence, and before the introduction of "process"; but he ultimately decided that architecture possessed attractions too strong to be withstood. As a result of this decision, and after long and hard preparatory study, he found himself perched on a high stool, with Bruce Price of New York as his employer and mentor; from thence to the office of Green & Wicks of Buffalo, as a designer of matured powers and experience. Having completed his *wanderjahr*, he formed a co-partnership under the firm name of Gordon, Bragdon & Orchard, and for some years practiced with an estimated success, creating during this period one of the premiated designs for the proposed New York City Hall. A dissolution taking place, Bragdon continued to practice alone until 1896, when Mr. Con. Hillman became associated with him under the firm title of Bragdon & Hillman, a name already well and widely known.

HARVEY ELLIS.





LXXIX.

Great Staircase, Blois, Central Pier, Detail.

## Club Notes.

A regular monthly meeting of the "T-Square Club" was held on Wednesday evening, October 20. This was the first meeting held by the Club in its new house. For some time past the Club has been without a home, holding its meetings in the offices of the various architects who have kindly extended their hospitality to their fellow members. This, however, was always considered a merely temporary arrangement, and the Executive and House Committees have been active in their search for suitable quarters, and now feel that a place has been secured as nearly ideal as is possible under existing conditions, having rented on a five years' lease an old stable, the ground floor of which has been sub-let as a carpenter shop, the Club retaining the two upper floors for its own use. The upper floor has been converted into one large room 30 x 35 feet, where the Club will hold its meetings. Five casement windows extend all across the front and three at the back. A generous brick fireplace has been built at one side, and the walls and ceiling are lined with wood of a dark color. Very little was necessary to be done to this place, with its sloping ceiling and general Bohemian air, to make it a cosy home.

At the meeting the walls were well covered with the sketches made by the members during the past summer, which constituted the subject for competition at this meeting. Charles Z. Klauder, with a large collection of water color and pencil sketches showing much freedom and breadth of treatment, was awarded First Mention. Second Mention was awarded to Nicola D'Ascenzo, who displayed a number of admirable sketches and decorative compositions, mostly done in oil colors, and Third Mention to Frank A. Hays; who submitted some charming pencil sketches and water colors of an excellence we have grown to expect in his work. The sketches of Messrs. Bissegger, Mann and Pearson are also deserving of special mention, notably the pencil sketches of Mr. Bissegger.

Mr. Edward H. Coates, President of the Pennsylvania Academy of the Fine

Arts, was elected an honorary member of the Club.

President Knickerbacker Boyd made a short address in which he said: "Your Executive Committee have felt the responsibility placed upon them of securing new quarters for the Club. We have had in our minds all along just such a place as this; a cosy, comfortable building, almost perfectly adapted to our needs.

"Now that we have a home of our own it may not be out of place to mention the necessity of a closer relationship among ourselves, and the advantages to be gained from a genuine enthusiasm manifested by participation in the affairs of the Club.

"I consider that Club life must be made an integral portion of the development of this Club and ourselves.

"We have enlarged our sphere of activity; have taken important action on matters that concern us; have sent a representative to a foreign congress of architects, and have shown ourselves to be an aggressive, energetic organization.

"We have here banded together as a Club to educate and better ourselves. We must prove to the world that we can take our part in its affairs because we have that thorough knowledge of our profession which must cause our opinions to be recognized.

"Let us all pull together for the highest cause of our profession; let us work as a unit and make of this Club a body compact and concrete."

Immediately after the meeting an informal smoker was held, and a collation served in honor of the occasion.

The second annual exhibition of the Cleveland Architectural Club opened on the tenth floor of the New England Building November 15, and continued to the 27th

The following cities, schools and clubs were represented: Boston, New York, Philadelphia, Elmira, N.Y., Columbus, O., Detroit, Chicago, Columbia University, Cornell University, Lawrence School, Harvard, Ecole des Beaux-Arts, Paris, Atelier Masquery, University of Pennsylvania, School of Industrial Art, Philadelphia, T-Square



LXXX.  
Great Staircase, Blois, Ceiling.

Club, Chicago Architectural Club, Detroit Architectural Club and Cleveland Architectural Club.

Two prominent features of the exhibition were the memorial collection of the works of Richard Morris Hunt, loaned by Mrs. R. M. Hunt and Mr. R. H. Hunt, and the exhibit by the Government from the Nashville Exposition.

The Club now numbers a membership of nearly sixty, and has a healthy organization. The fact that it has taken up a second exhibition speaks for this. Plans have been perfected whereby class work will be taken up as soon as the work of the exhibition is out of the way.

Provided a sufficient interest is shown, the Boston Architectural Club will arrange for the season of '97-'98, the following classes: 1, Planning Class; 2, Pen and Ink Class; 3, Life Class; 4, French Class; 5, Modelling Class; 6, Water-Color Class; 7, Class in Decorative Design. Non-members are to be admitted to these classes on payment of a fee. There has also been arranged a series of "Municipal Problem Competitions," under the direction of Mr. Robert D. Andrews.

Messrs. Richard E. Schmidt, H. Von Holst, Arthur George Brown, Dan Everett Waid, Dwight W. Perkins, Harry Dodge Jenkins and Adolf Bernhard, the former officers of the Chicago Architectural Club, were the hosts at a "Bohemian Night," held by the Club on October 25. On November 1, Mr. William A. Otis delivered an illustrated lecture on "The Development of Architectural Styles," at the Club's rooms.

With the meeting held for the election of officers on Oct. 11, 1897, the Chicago Architectural Club entered upon a new year which gives promise of being one of the most prosperous, if not *the* most prosperous, in its history.

Never before have the members manifested so much interest in the work of the Club, and never before has there

been promise of their work bearing such good fruit.

Classes in pen and ink rendering and in water colors have been formed with large attendances, the former class under the leadership of Mr. Birch Burdette Long and the latter under the leadership of Mr. Harry Dodge Jenkins. Both of these gentlemen have long been recognized as leaders in their respective branches of work.

An excellent lecture course has been arranged under the auspices of the Club, and the members will be given an opportunity of listening to men eminent in the profession of architecture. Lecture nights and Bohemian nights alternate, one or the other occurring each Monday evening, in connection with which the members will examine and criticize working drawings loaned by leading architects for the occasion. Also on these nights will be exhibited examples of class work and club competitions.

But more than any of the foregoing features, the scheme to instruct the members in the practical adaptations of architectural principles by means of the *projet* system, seems destined to bring the most comprehensive good, both to the individual members and to the Club itself. In pursuance of this scheme nine of the prominent architects and chief draughtsmen of Chicago have volunteered to assume the leadership of these different squads, each of which is to prepare a *projet* to be exhibited on certain Bohemian nights, the members of the squads to act as "hosts" on that night. These exhibitions of *projets* will occur every two weeks beginning January 4, and one *projet* will be exhibited each time. Each active member of the Club is assigned work in one of these groups. The gentlemen acting as leaders of these squads are Mr. Dwight H. Perkins, Mr. W. B. Mundie, Mr. Robert C. Spencer, Jr., Myron H. Hunt, Geo. G. Dean, Edward G. Garden, H. M. G. Garden, Frank Upman and Elmer C. Jensen. With this new feature added to the work of the Club, and with the members entering into the work with the greatest enthusiasm, there seems little doubt but that the coming year will be most suc-

cessful, and that through these influences and opportunities the Chicago draughtsmen can hardly fail to be benefited.

In the first competition held by the class studying the orders in the Rochester Sketch Club, the following awards were made by the judge, Mr. E. S. Gordon: First Mention to W. L. Phillips; second, to A. M. Garbutt; third, to Francis S. Swales. The problem was, "A window in which the Tuscan order must be employed." The next subject for competition is "A doorway to be placed under the window submitted in the previous competition and to be in the same style." The Club invites any draughtsman who will agree to submit one drawing a month in competition to become a member of this class.

The last exhibition of the Beaux-Arts Society was held on October 27, 28 and 29. Only the drawings of Class "B" were on exhibition. The judgment was held on the evening of Thursday, October 28, and mentions were awarded as follows:—

First Mention: John O. Lofquist.

Second Mention: William A. Brown, R. Farrington, Arthur E. Wells.

Third Mention: H. Palmer Kelly, Christian F. Rosborg, Benj. W. Levitansky, Cornelius H. Wenn, George A. Licht, J. Henri de Sibour.

Hors de Concours: Henrik Wallin, Beverly S. King, A. H. Wright, C. L. Herckes.

### Notes.

The six-inch scale, advertised by the Keuffel & Esser Company in our last issue, is an article worth calling special attention to. It is made with absolute accuracy, as are all Keuffel & Esser instruments, and is put up in a substantial leather sheath. It costs \$1.38, which includes postage.

The two hundred photographic illustrations in the *Municipal Architecture of Boston*, are from negatives by E. E. Soderholtz, who has no equal in America for this class of work.



HOFFMAN HOUSE.

NEW YORK CITY.

Venetian blinds may be classified as either good or bad, for those that are not perfect in workmanship and material are about the worst possible nuisance, and the bad, as usual, far out-number the good. Under the latter classification the Burlington blinds belong by reason of the marked improvements in fittings and method of hanging and the stock and workmanship put into them. Nothing but their superior quality accounts for the great number sold in New York City, where they have been put into the finest structures. We have illustrated above one of the buildings in New York, fitted with these blinds. It is a typical example of the sort of order that is constantly coming into the New York office of the Burlington Venetian Blind Co.





LXXXI.

Library of St. Mark, Venice.

# THE BROCHURE SERIES

## OF ARCHITECTURAL ILLUSTRATION.

VOL. III.

NOVEMBER, 1897.

No. II.

### LIBRARY ARCHITECTURE.

BY RUSSELL STURGIS.

BOOKS are thought by many to form the most beautiful wall decoration which a room can receive. Not only to the lover of books are books delightful; their marshalled ranks, uniformed in morocco, dark brown, dark red, scarlet, green,—in hog-skin, in vellum and in calf; prettily contrasting in color and harmonized by the free use of gold,—this display, indeed, is one of the most comely things with which a wall surface can be adorned. Many a working library, however, is devoid of this charm. Mr. Darwin's workroom, with its piles of herbaria and *dossiers* lying flat on shelves with tags hanging out, and his books treated as "mere tools of his trade," torn in two when the volumes were too heavy—such a library, however noble and even awe-inspiring when the pervading spirit of the room has worked upon the beholder, is yet quite out of the line of decorative effect. But no one can be insensible to the beauty of a well-ordered display of books, even when the workman is among his books and the shelves show many a gap where volumes are temporarily out of place and in active use. In like manner, in the great libraries of Europe: the long row of halls filled by "The King's Library" in the British Museum, is as charming to walk through as the pic-

ture galleries of the Louvre. The Royal Library in the Hofburg, at Vienna, while richly adorned in an architectural way, is splendid, also, in its wall surfaces covered closely with well-bound volumes which tell a tale of ancient learning, and the library at St. Gallen is one of the most brilliantly successful pieces of decoration for a small and low public hall that has yet been devised. The books! They constitute the main feature of the scheme for the adornment of these ancient halls of learning.

Not that there has been neglect of the architectural features which, according to the ancient standard in such matters, should set off the books. The libraries we have named above, at Vienna and at St. Gallen, are famous instances of that. The Radcliffe Library at Oxford is more severely architectural than they, in that it reflects the severe Palladianism of England as against the excessive baroque of the German interiors; and the magnificent carved wood fittings of certain rooms of the National Library in Paris are worthy of the most careful study by those who wish to adorn the richer interiors of our own time.

The interior of the Vatican Library, that is to say of those rooms which constitute "the gallery" or the Library of Sixtus V., is decorated with the most



LXXXII.  
Library of the Vatican, Rome.

superb inlaying of its cases and painting of its vaults. The splendid library at Grenoble, lighted by a system of domes resting on pendentifs, has a decoration partly of books and partly of architectural treatment.

The modern library, however, when it is of any pretensions to size and system, disregards both these means of adornment. Neither the books nor yet the architectural fitting up of book-rooms are now in place. More scientific consideration of the problem has relegated the books to fireproof warehouses where they, the books, may be arranged as systematically as may be desired and without any loss of space; where the passages are narrow and are visited by the attendants of the library alone; where height from floor to floor,—that is to say, between galleries—is only such as allows the attendant to reach every shelf without leaving his stand upon the floor; where, in short, the books are stacked literally, and where the names “stack” and “stack-room” accurately describe the placing of the volumes of which the library is composed. Special volumes may, indeed, be required for exhibition. A painted miniature, a rare plate, a rich binding, may all need to be shown to the public, and for that purpose to be put under glass exactly as any other precious work of art of small size would be prepared for exhibition. But these are separated from their fellows and do not share in the general storage of the library, the books of which are there for easy access and rapid delivery to persons requiring them, and not for show at all.

The modern library, then, consists of a stackroom, which is a mere place of storage with convenient access to every corner and every remotest shelf; and of rooms for other purposes than storage, which are rooms in no way remarkable in themselves or distinct from the rooms of other public buildings. The exterior of the stackroom lends itself, indeed, to very unusual architectural treatment and of this, anon. The exterior of the other parts of the building does not differ really from the exterior of a city hall or a State house of size comparable to that

of the library itself. The reading-room for the general public is, perhaps, the largest necessary room. Special reading-rooms come next,—that is to say, the rooms in which certain particular lines of study may be more quietly pursued than in the larger room. There is also, perhaps, a delivery room, where books which are allowed to be taken away from the building are delivered to applicants, and the same room serves for the return of books brought back. These are the rooms which would naturally be treated in a dignified way, with high ceilings and with large windows for the free admission of light, at once, and for stately effect also, both within and without. These rooms naturally fill the more important stories, and their windows occupy the more important part of the exterior fenestration. Packing-rooms, bindery-rooms, rooms for the cataloguers, are numerous according to the size of the library, but the public has no need of access to them, and it seems inevitable that they should occupy basement or attic stories, or should front on a court: it being always provided that they have abundant light for the necessary carrying on of the continuous, day-long work which a large library requires. If, indeed, a library has among its treasures, books, prints and maps which should be displayed as works of art, separate rooms for this purpose may well be added, and the library becomes, in part at least, a museum of art. The distinction is not well maintained, and cannot be, in small libraries, where, indeed, the reading-room must serve also as a place of exhibition; but a large library should have the rooms for exhibition specially set apart for that purpose, because of the great annoyance to students caused by the coming and going of sight-seeing visitors.

As the illustrations of this number are chiefly views of exteriors, we are brought now to the consideration of what are the exterior effects natural to, and proper for, a large library, but it appears that no one of our illustrations shows the exterior of a stackroom. This part of the library building, its very centre and reason for being, has been better treated, perhaps, in the

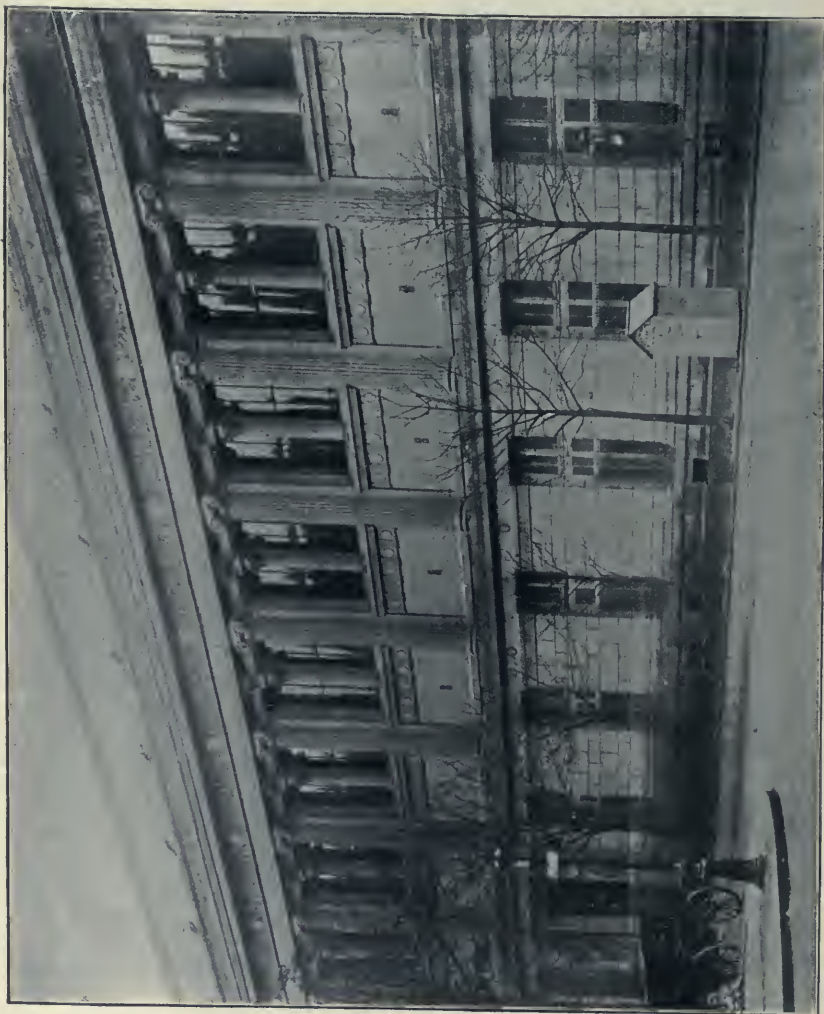


Congressional Library at Washington, than anywhere else. At least, no other instance comes to mind where so intelligent an arrangement of the lighting has been made. It is easy to put your books in the basement and to give them nothing but electric light, but that is not to face the difficulty or to solve the problem. If it be assumed that daylight is, on the whole, better and more wholesome, as it is certainly cheaper than electric light; then a well windowed stackroom is better than a dark one. The stackrooms at Washington, are, indeed, left in the interior, and the light comes to them from courts, from which alone their outer walls can be seen; but the treatment of these has been shown in this instance to be so easily made architectural that it is quite within possibility that a future great library will show the stackrooms as a part of its adorned exterior. As for the other rooms of the library, they can be put off with no characteristic treatment at all, as in the great National Library at Paris, or they can be treated without significance, with two long rows of round arched windows, as in the Royal Library at Munich. Or they can be gathered round a great rotunda and help buttress its dome, as in the Library of Columbia University, — that is to say, they can be treated in a wholly abstract way. The Library of St. Geneviève, at Paris, was especially arranged to show its books in the interior of a great hall, and the system of small windows below and large windows above was especially arranged for this; the large windows opening into the great hall above its wall of books. It has, however, been found perfectly feasible to apply this exterior, with but the slightest modifications, to the exterior of the public library at Boston, which has in its interior no approach whatever to the dispositions and arrangements of the Paris institution. This example seems to show how devoid of characteristic features the exterior of a library may be. The great library of the British Museum has no architectural exterior at all, as it is lost in the mass of buildings whose only face toward the world is the well known colon-

nade, which has neither beginning nor end; nor relation to the structure it adorns. The Royal Library at Stuttgart and the Ducal Library at Wolfenbüttel have agreeably disposed exteriors in the modern classic taste, the former being especially fortunate in the immense amount of light given to its interior. The same characteristic, that of abundant light, is found in the new public library at Chicago, but this characteristic, that of having abundant daylight furnished to their interiors, should be the characteristic of every public building, and no one of the structures last above named, can be said to differ in any way from what a building for public offices would be.

The purpose of these remarks is to point out that as yet no special characteristic of a library exterior can be said to exist. You provide large rooms and small rooms, you arrange them according to the best judgment of the director and the architect for convenience of daylight work; you open windows where they are most needed, and you compose such an exterior as seems to result from the circumstances of the case, but it would be a very exalted and very mystical sense of inner fitness in the design which would attempt to discriminate between the outside of the modern library and the outside of a public building of totally different purposes.

All except the stackroom! That, indeed, may be as refreshing a problem for the hard-witted architect to struggle with as he is liable to meet with in the busy modern world. If a great library building should ever be planned with strict regard to utility — that is to say, with strict regard to common sense — it may well be that the reading-rooms will be within and shut off from every noise, as the reading-rooms of the great libraries in London and in Paris are. If, then, the stackrooms should be arranged along the exterior, enclosing the courts which give light to the reading-rooms within, a really interesting problem of designing would be given the architect, and then, indeed, the library would grow to have an architectural physiognomy of its own.



LXXXIV.

Library of the Ecole de Médecine, Paris

## Plates.

The series of illustrations given in this issue is of necessity extremely heterogeneous. In order to give a comprehensive collection of the principal or typical libraries, both past and present, it was considered desirable to show as great a number of buildings, and from as many countries and periods as possible. With this purpose in view the two Italian libraries from Venice and Rome begin the list. These are more archives than what we consider libraries in the modern sense. There is nothing in the least distinctive of the purpose for which they are now used in the plan or the architectural treatment of the exterior or interior of either one.

As we come down to more recent times the British Museum and Radcliffe Library at Oxford still retain something of the character of a treasure house although they are both working libraries.

Later still come the library of Ste. Geneviève, and the school libraries of the Ecole des Beaux-Arts and the Ecole de Medecine with a treatment of façade similar to that of Ste. Geneviève, which despite the criticism of Mr. Sturgis in the previous pages, has become a thoroughly and easily recognized architectural treatment, the reasonable and natural result of practical conditions.

This arrangement of a library building in which the second floor is used as a reading-room has many arguments in its favor, especially in libraries of moderate size. When this plan is adopted the design of the façade follows as a matter of course. Diffused light from above is desirable in a reading-room, and where book-cases or alcoves are arranged about this room it is perfectly reasonable that the lower portions of the windows should be filled with a curtain wall. There may be important differences in the arrangement of the large reading-rooms referred to by Mr. Sturgis, but in all these cases there is a general resemblance in the fact that the second floor (or certainly the portion lighted by the windows in the façade) is given almost

exclusively to a large reading-room. The arcaded treatment of the façade seems to express this very clearly, and the lower story with its stronger walls and smaller window openings is an equally logical expression of the purpose of the interior which is given up to working rooms which naturally require less light, and are of less relative importance in the general scheme of the building.

The small special libraries shown in the remaining plates are so simple in treatment and involve so few difficulties in planning that they hardly require separate consideration.

LXXXI.

LIBRARY OF ST. MARK, VENICE.

This is justly considered one of the masterpieces of Italian Renaissance architecture, and is without doubt the masterpiece of its architect, Sansovino. It stands on the Piazzetta, facing the Ducal Palace, and its position, as well as numerous points of similarity in design, suggest the comparison of the two buildings so dissimilar in style. Fergusson points out the features in which one or the other seems to him to excel. Architecturally, this is a most instructive comparison. Those who wish to follow it for themselves can find a section of the arcade of the Ducal Palace illustrated in Vol. I., No. 1, of THE BROCHURE SERIES.

LXXXII.

LIBRARY OF THE VATICAN, ROME.

The Vatican Library was founded by Pope Hilaire I., in the fifth century, and has been enlarged by each of his successors. It occupies one of the wings of the Vatican Palace adjoining the museum and the portion of the building designed by Bramante. The books are arranged in closed cases standing against the piers and walls. The decorations are of the richest type of the Italian Renaissance.

LXXXIII.

LIBRARY AND MUSEUM, GRENOBLE, FRANCE.

The library portion of this building is on the side hidden from view. The design is that of M. Charles Questel.



LXXXV.

Library of Ste. Genevieve, Paris.

LXXXIV.

LIBRARY OF THE ECOLE DE MEDECINE, PARIS.

The modern façade towards the Boulevard is by Ginain, and one of the most interesting examples of recent French architecture.

LXXXV.

LIBRARY OF STE. GENEVIEVE, PARIS.

This is the design of M. Henri Lebroust.

LXXXVI.

LIBRARY OF THE ECOLE DES BEAUX-ARTS, PARIS.

This portion of the buildings of the school was designed by the architect, Duban.

National Library in Paris and in the Library of Congress in Washington.

LXXXVIII.

RADCLIFFE LIBRARY, OXFORD.

This building was designed by James Gibbs, one of the ablest and most noted English architects of the eighteenth century. Fergusson selects this as one of the two buildings upon which Gibbs' fame rests, although he points out that it is most conspicuously lacking in the expression of the purpose for which it was built. In many respects, especially from the utilitarian point of view, it must be considered a failure.



Queens College Library,

Oxford, England.

LXXXVII.

THE BRITISH MUSEUM, LONDON.

Although an interesting and impressive example of the classic revival, this building, designed by Robert and Sidney Smirke, has been as severely criticized as any building in modern times. Its main fault is the disregard of the requirements for which it was intended; and its principal merit, aside from its imposing peristyle, is the great domed reading-room occupying the central court, originally intended to be open. This arrangement of a central circular reading-room has been followed in the

LXXXIX.

LIBRARY OF ST. JOHN'S COLLEGE, OXFORD.

XC.

LIBRARY OF TRINITY COLLEGE, CAMBRIDGE.

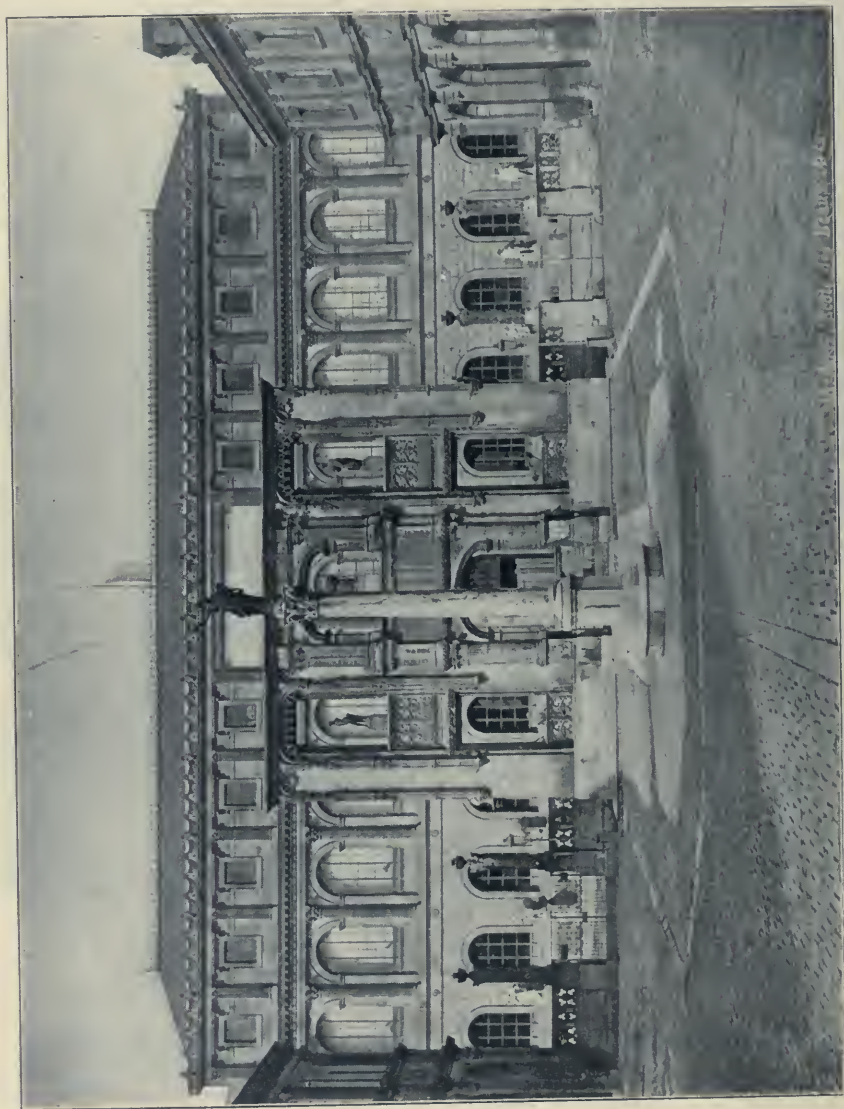
This is from the design of Sir Christopher Wren. The exterior facing on the courtyard is very effective, and recalls in massing and proportions the design of the Library of St. Mark in Venice.

XCI.

BODLEYAN LIBRARY, OXFORD.

XCII.

THE NATIONAL LIBRARY, BERLIN.



LXXXVI.

École des Beaux-Arts, Paris.

# PLANNING A LIBRARY.

FROM THE LIBRARIAN'S POINT OF VIEW.

BY WILLIAM E. FOSTER,

*Librarian of the Providence, R.I., Public Library.*

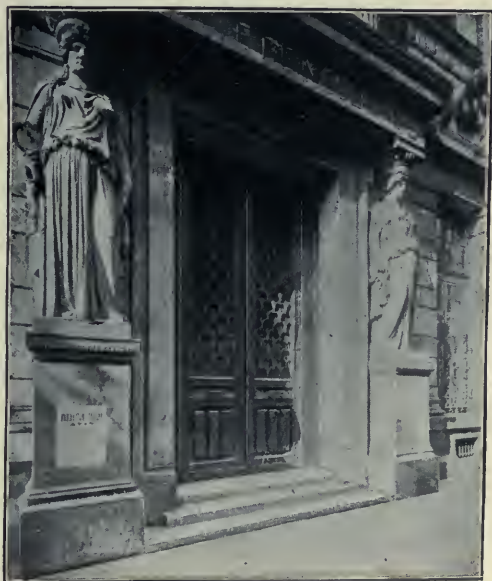
IT is certainly well to recognize that the "points of view" of the architect and the librarian are distinct from each other, but it would be a misfortune to regard them as necessarily antagonistic to each other.

On the contrary, the relation existing between the two, while planning a library building, might well be regarded as a kind of temporary partnership which had been entered into for the accomplishment of a given end. In the satisfaction of attaining that end, they both share; — that is to say, in securing such a building as meets most fully the demands alike of artistic and of practical considerations. If we may regard the architect as

being, — for the purposes under consideration, — the "spokesman" for his art, which he does well to regard as a jealous mistress, and the librarian as the "spokesman" for the practical needs of the library's future users, it is obvious that nothing will be gained on either side by resting satisfied with a low aim, or by stating the demands of the opposing considerations in any other than their maximum terms. It is the "resultant" of the two which will take form in the completed building.

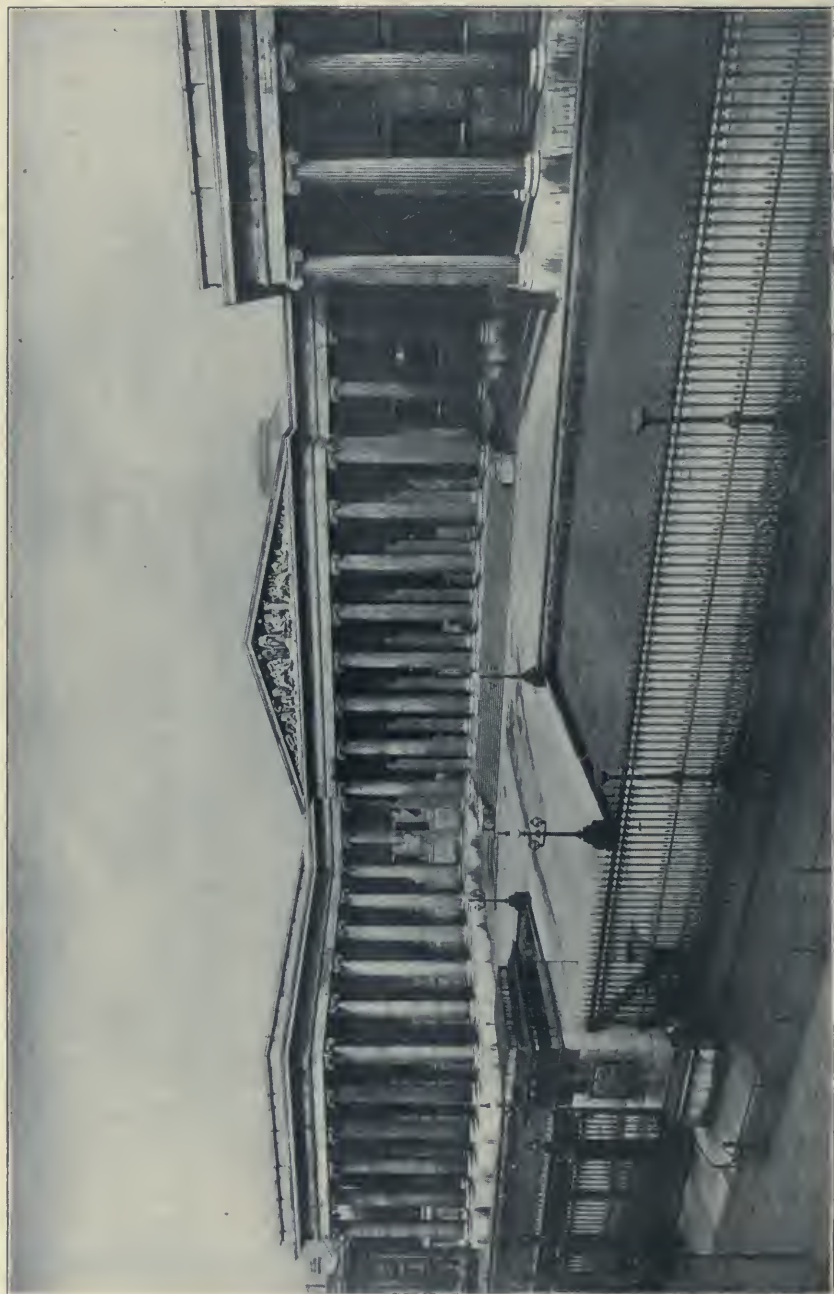
To state the matter from the librarian's point of view, therefore, it may be said that the architect is entitled to precise information as to what the librarian would prefer to have, if he could get it. This is entirely reason-

able, since the details of a library building are only "incidental" with the architect, just as indeed the "building" phase of library work is only incidental with the librarian. This knowledge of practical needs cannot easily be made too definite or too precise, and it will be useful to glance at some of the processes by which the librarian himself will need to arrive at it, before he can impart it to the architect. Like most first-hand knowledge, it is chiefly the



Doorway, Ecole de Medecine, Paris.

result of personal observations which have been made, noted, and compared. But a prudent librarian will not fail to verify and correct his own observations by those of others, whether embodied in print, or obtained through comparing notes, verbally, with other librarians, or with members of his own staff, or with others who have observed carefully. Even an apparent misfortune such as an unduly prolonged stay in a building with exceptionally unfavorable conditions, while waiting



LXXXVII.  
British Museum, London.

for a new building, may be utilized in a more effectual avoidance of these conditions in the new building. It is he who knows "where the shoe pinches" that can best suggest a change; and in the steps leading to the planning of all such details as lighting, heating, ventilation, protection from fire, protection from noise, protection from dust and, above all, convenient arrangement, such an experience ought to count. It is always to be borne in mind that it is the convenience of the readers rather than that of the employees that the planning of a library building takes into account. Certain "time-saving" details of library arrangement have sometimes been discussed as if they had chief or exclusive reference to the "time" of the employees. On the contrary, the time of the employees is not their own, but belongs to the public, and if by a faulty arrangement any of their time is unnecessarily or unduly wasted, it is the public that will pay the penalty in a more tedious wait, or a lengthened journey. For the readers, therefore, the librarian stands as "spokesman," in the steps leading to the planning of the building.

When, however, the librarian has availed himself of every conceivable opportunity for securing the observations needed, and has intelligently and patiently digested the results, it is a question how best to make this information available. There is no method which can compare, in definiteness and in effectiveness, with that of drawing a plan to a scale. The librarian does

not here enter the domain of the architect, — a practice to which every sound principle is opposed. On the contrary, by thus outlining the rooms of the future building, — roughly, to be sure, but with essential accuracy, since the dimensions are drawn to a scale, — he simply clarifies his own ideas of the requirements involved. A single one of these plans, however, is not enough. Let him decide on the total number of rooms which will be included, as twenty or more. Then let him endeavor to free his mind of all precon-

ceived ideas, and rearrange these twenty separate rooms, — somewhat as a child might rearrange the blocks of his toy block house, — in every conceivable order, on the mathematical principle of "permutations." In drawing a new outline plan for each one of these successive rearrangements, he will find that some will at once show themselves to be wholly incompatible with the requirements, but if he carefully redraws the others, in detail, shifting a given

room from one end of the building to the other, or even, in some instances, from one floor to another, — he will be surprised at the new light which will thus break in on his mind. Certain relations or juxtapositions which had been tacitly assumed to be necessary and obvious now no longer seem so "obvious." Should this prolonged and minute comparison of relations lead the librarian to the selection of one of the numerous rearrangements, as expressing, on the whole, a maximum of agreement with the given requirements, this is still not something to be regarded as



Doorway of Ste. Genevieve. Paris.



LXXXVIII.

Radcliffe Library, Oxford, England.

a "plan," proper. It merely serves as "materials" for answering the inquiries of the architect. It is, as already indicated above, what the librarian would prefer to have, *if he could get it*; and he is therefore not unprepared for the inevitable deductions, diminutions and modifications. But these modifications are factors which must in any case be allowed for, and it is consequently only a "resultant" of the various competing tendencies which the instructed librarian expects to get. Nor does he regard his own interpretation of the apparently best arrangement as final. This field, — that of arrangement, — is indeed one in which it is peculiarly needful for the librarian to familiarize himself with the minutest details, even including the location of the book-cases, the furniture, etc.; yet arrangement is something that belongs, as truly as does design, within the province of the architect. Moreover, while the librarian will do well to exercise, whenever possible, "the scientific use of the imagination," this is, with him, only "an incident," while with the architect it is a part of his life-long training. Surely any client, — whether a librarian or not, — who should neglect to profit by these fruits of his architect's facility and insight, would show a strange blindness, to say the least.

Before considering his own task complete, however, the librarian should thoroughly inform himself on some of the points named below. With a view to the demands of future extension, he will need not only to consider the size of his lot, and that of the adjoining lots, and the probable annual rate of increase of his volumes, but also to map out the actual lines on which the future additions to the building must apparently run and yet violate no principle of convenient arrangement. He needs also to take into account economy of time and space, from the reader's point of view, wherever possible. "A straight line," it is never to be forgotten, "is the shortest distance between two points," and the relation of the place where the books are, to the place where the reader is, should always illustrate this principle. It is in connection with

practical details of this kind that his prolonged canvassing of the matter with the separate members of his staff ought to count for something. All these details the librarian will need to correlate with each other. Again, he will need to take into account economy of administration, as well as economy of time and space, in planning the total number of attendants, with special reference to the probable amount of funds available (present and future). Should he be able so to compass his arrangement of rooms and his scheme for "manning" them, as to combine the two considerations, he will indeed be fortunate. A modern library, moreover, needs to be so planned as to provide large spaces for readers as well as for the housing of books; and a generous share of its space is given up to such rooms as study rooms, reference rooms, etc. Here books are ranged on open shelves, and provided with every facility for enabling the reader to make the most effective use of them, on the spot. To estimate the probable number of readers or students who must thus be provided for — in addition to the not inconsiderable space appropriated for the purposes of delivery of books for home use — is a distinctly more difficult problem than to forecast the annual increase of the books. In most of the libraries where it has thus far been attempted, the estimate has proved to be too low. To the above should be added, of course, the various considerations in regard to lighting, height of book-cases, protection from noise and other interruptions, embodied in Mr. Charles C. Soule's excellent summary of "Points of agreement among librarians"\* (as to library buildings), as well as the increasing tendency to open shelves in all libraries.

Such are some of the ideals which the librarian has most at heart and is bound to defend. It is not inappropriate to inquire what should be his attitude towards the architect's ideals. It is true that the librarian, as above stated, is here to be regarded as the spokesman of the public's practical needs. It is true also that "a little knowledge" of architecture cannot fail

\*See page 185.



LXXXIX.

Library of St. John's College Oxford, England.

to be a dangerous thing to any librarian who is not continually impressed by the inadequacy of his own knowledge. Nevertheless, it is difficult to see what would be gained, on either side, by a total unfamiliarity, on the part of the librarian, with all that is significant and inspiring in architecture; and it may safely be said that he should be a man to whom a noble design would not appeal in vain, and to whom a notable opportunity on the part of the architect would be for him also a source of satisfaction. Indeed, the problems which engage the architect in the planning of a library building are neither few nor slight. Just as the sculptor who wishes to reproduce his statue from a human model must first have learned the location of the systems of bones and muscles, of veins and of nerves, that are found below the surface, so the architect whose aim is to give the artistically successful outward expression to a library building must first know the nature of the operations within the building, and the complex relations which there exist. For this information, as above indicated, he turns to the librarian. Moreover, since individuality is always a highly prized factor, in architecture as in sculpture, the nearer the architect can come to expressing in his design some feature which belongs not merely to the type in general, but to this individual building, the closer he will approach to his ideal standard of success. Nor is this solely a question concerned with the different varieties of library buildings—as the points wherein a college library will differ from a public library—but it is involved in those perplexing questions which from time to time arise from the apparent clashing of the artistic requirements with the practical demands. It has more than once happened that an encounter with such a problem as this has put the architect “on his mettle.” None but the best results, therefore, are to be looked for when, as in instances familiar to the present writer, the architect has held strongly to the requirements of his art, but has been eager to learn and meet the library’s practical needs, while the librarian, holding with equal steadfastness to

every practical demand, has nevertheless rejoiced in every instance where the architect has triumphed over the difficulties of a perplexing situation, and thereby brought his art to a higher level.

### Brochure Series Competitions.

During the coming year a series of competitions in drawing and design will form a regular department of THE BROCHURE. The subjects set will be sufficiently various to afford opportunity for the display of ability in many lines, and not so technical as to be prohibitive to any but specialists. At least six of these competitions will be announced in the forthcoming volume; and as many more as the interest of our readers seems to warrant.

The result of former competitions has been so gratifying, both in number and excellence of designs submitted, that the publishers look forward to making this department in future a regular and important feature of the magazine.

The drawings in COMPETITION A, which was announced in the July issue, have all been examined and passed upon by the judges,—Mr. C. Howard Walker, Mr. Bertram Grosvenor Goodhue and the Editor of THE BROCHURE. The prize drawing and the brief criticisms of the judges will be printed in the December number, together with some of the most interesting designs.

It might be well to warn intending competitors that their designs cannot be considered unless they conform in every respect to the required conditions; a warning suggested by the fact that some of the best designs submitted in COMPETITION A were necessarily excluded on this account.

The size and proportions of drawings should be carefully observed as this is of the first importance.

COMPETITION B, which is announced on advertising page vii. of this issue, propounds a very interesting subject, bringing in as it does the application of color as a factor in the design. The result of this Competition is to be announced in the February issue of the new Volume.



XC.

Library, Trinity College, Cambridge, England.

# The Brochure Series

## of Architectural Illustration.

PUBLISHED MONTHLY BY

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Entered at the Boston Post Office as Second-class Matter.

While the Editor of THE BROCHURE SERIES cannot hold himself responsible for the care of unsolicited photographs, drawings or manuscripts which may be submitted to him, he will always be glad to consider them; and will return those that he cannot use when postage for that purpose is provided.

As this special number of THE BROCHURE SERIES is, from the character of its contents, likely to find its way into the hands of many readers who are not subscribers, the publishers take the opportunity to set forth here its character and aims.

THE BROCHURE prints each year over one hundred half-tone engravings from photographs of European architecture, the subjects being carefully chosen as those likely to be of most value and interest to architects and draughtsmen. The list of the plates in Volumes II. and III. printed on advertising page v. of this issue will give an idea of the kind of illustrations which may be expected. Each issue deals with some particular building or class of subjects; the issue preceding this, for instance, illustrated in detail the Great Staircase of the Chateau of Blois; the succeeding issue will contain photographs of beautiful Italian holy-water fonts; the first number of the new volume will illustrate Sicilian churches.

It will be evident that such pictures are of great value, not alone to architects and draughtsmen and students of art, for whom they are primarily intended, but also to all those to whom the best of the world's architecture appeals. An article of detailed description and comment accompanies each set of illustrations.

Although these photographs and the description of them form the chief

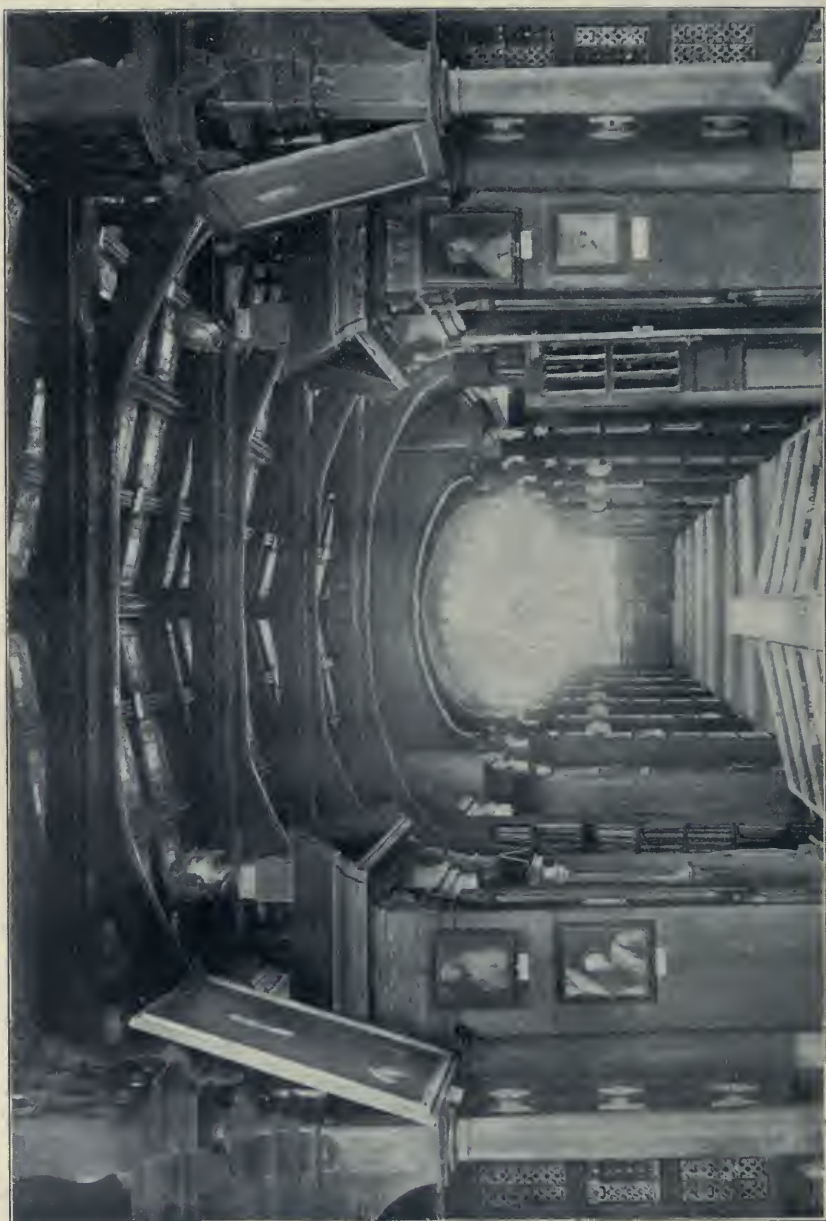
features of the magazine they by no means constitute its entire contents. Articles of various kinds are constantly published which interest all who in any way have to deal with architecture. In the current volume, for example, the lives and work of four of America's best architectural draughtsmen are reviewed, and illustrated by examples of their drawings.

Under the caption of Club Notes, the doings of the Architectural clubs and of their members are regularly chronicled.

Competitions, in which a very lively interest has been shown, are set from time to time, and in the coming volume will be more frequent than in the past. That which is announced on advertising page viii. of this issue may be taken as a specimen.

Beginning with the first issue of the new year (January, 1898), the publishers will open a column for the reviews of books dealing with architecture and the related fine arts. This department will deal with such books from the side of the purchaser. That is, it will aim to tell the reader what the book is, what it contains, and what, from the point of view of an authoritative writer, will be its value to a purchaser. As architectural and art books are expensive yet necessary "tools," it is hoped that, to the buyer who wishes to expend his money wisely, it will be a valuable guide. As a convenience, the publishers have also arranged to supply at the listed price, any book, good, bad or indifferent, mentioned in this column.

A new feature, which will add to the value of THE BROCHURE as a reference book, will be a combined index to Volumes I., II. and III., which is to be issued with the last number of the present volume. This index will be a complete guide to the three hundred photographs of architectural subjects previously illustrated in the magazine. At the end of the sixth volume another combined index will be issued. Thus, as THE BROCHURE more and more completely covers the field of European architecture, it will become a more and more complete and valuable work of reference.



# POINTS OF AGREEMENT AMONG LIBRARIANS AS TO LIBRARY ARCHITECTURE.

BY CHARLES C. SOULE,

*Trustee of the Brookline, Mass., Public Library.*

IT has been stated that architects can get little help from librarians in planning libraries, because librarians do not agree as to what they want. This misapprehension probably arises from the fact that library

consider problems of building, appear to be unanimously agreed.

To librarians, most of these propositions will appear like truisms; but the necessity for formulating them appears in the fact that very few library build-



Old Riding School Library, Welbeck Abbey, England.

literature, while it abounds in discussions of mooted points of construction, contains apparently no recent statement of elementary principles. To elucidate these principles some preliminary knowledge of the subject is required, and architects, asking advice without experience of their own, draw out and emphasize the striking differences of opinion, rather than the substantial agreements among librarians.

It is the purpose of this paper to state certain principles of construction as to which those prominent American librarians who have had occasion to

ings erected in this country during the last ten years conform to all, and some of them conform to none, of the axiomatic requirements.

Librarians are generally agreed as to the following fundamental principles of library architecture:

*A library building should be planned for library work.* The work of a library is (or should be) as definitely marked out as that of a school, or a hospital, or a factory; and the building to contain it should be planned with as much care, and as intelligent a regard to its proper functions.

*Every library building should be planned especially for the kind of*

\* Reprinted by kind permission of the Editor, from the *Library Journal*. [Vol. 16, No. 12, December, 1891.]



XCII.  
National Library, Berlin.

work to be done, and the community to be served. Libraries differ widely in scope. The college library, the State library, the reference library, the professional library, the town library—while they have much in common—have different requirements as to rooms and arrangements; and libraries of the same class may differ as to probabilities of growth, conditions of equipment, and opportunities for usefulness.

*The interior arrangement ought to be planned before the exterior is considered.* Within such necessary limitations as the size and shape of the lot and the amount of money available, the first consideration of the librarian, building committee and architect should be, not what exterior style, but what interior plan, is best for the library.

*No convenience of arrangement should ever be sacrificed for mere architectural effect.* While the architect may suggest changes of plan which will improve the appearance of the building without sacrificing any point of usefulness, no essential conveniences for library work ought to be surrendered. It is far better that a library should be plain, or even ugly, than that it should be inconvenient. A steam-engine, superb in finish but faulty in construction, is properly condemned. A library is a literary engine requiring equally perfect construction to do economical and efficient work.

*The plan should be adapted to probabilities and possibilities of growth and development.* In constructing a library it may be wise to build only for the needs of the present generation; but room and opportunity should always be allowed for future development. The community may grow, the library may increase beyond expectation, its methods may change, its sphere may enlarge, or the progress of library science may develop improvements in administration, requiring changes and enlargement.

*Simplicity of decoration is essential in the working-rooms and reading-rooms.* If money can be spared, the exterior of a library building, its approaches, entrances and corridors may be embellished to any extent; but

the rooms intended for use, while they ought to be attractive in form and color, should be free from that showy decoration which attracts sight-seers to disturb the quiet and distract the attention of workers and readers.

*A library should be planned with a view to economical administration.* No library can be so liberally endowed as to be beyond the need of economy, in time as well as in money. A well-planned library can be administered more smoothly and less expensively than a badly planned one. In order to save money, expedite work, and insure prompt service to the public, the rooms of a library should be so arranged as to require as few attendants, as few steps, and as little labor as possible. The librarian's room should be near the centre of the system, within easy reach of the public on the one hand, and the working-rooms on the other.

*The rooms for public use should be so arranged as to allow complete supervision with the fewest possible attendants.* The danger of mutilation or theft of books or periodicals is lessened, if every part of a reading-room is in plain view of the delivery clerk or of some other attendant.

*There should be as much natural light as possible in all parts of the building.* No artificial light can be as healthy for attendants and for books, so agreeable to the eyes, or so economical, as daylight.

*Windows should extend up to the ceiling, to light thoroughly the upper part of every room.* With high windows, and walls and ceiling of a light color, the upper part of a room holds and diffuses daylight. With low windows it may be a cavern of gloom.

*Windows in a book-room should be placed opposite the intervals between book-cases.* In planning a book-room or stack, the book-cases ought to be located and the windows ought to be so arranged as to cast light, and not shadow, down all the aisles.

*The arrangements of books in tiers of alcoves and galleries around a large hall is considered entirely obsolete.* The old style of shelving around the walls, in alcoves, and in galleries,

has been generally superseded by the use of floor-cases,—that is, double book-cases, arranged in parallel lines across the floor of a room,—or “stacks,” which are tiers of floor-cases one close above another. Shelves around the walls and in alcoves are still used in small libraries not likely to grow much; and in libraries where access to the books is unrestricted and space can be spared. A form of shelving which is growing in favor, is an arrangement of floor-cases in large rooms, with space between the tops of the book-cases and the ceiling, for ventilation and the diffusion of light.

*three feet from the floor.* This form of shelving leaves more elbow room in passing, admits more light, and provides a temporary resting-place for books in use or in transit.

*Three feet between floor-cases is ample for all purposes of administration.*

*No shelf, in any form of book-case, should be higher than a person of moderate height can reach without a step-ladder.*

*Shelving for folios and quartos should be provided in every book-room.*

*Straight flights are preferable to circular stairs.*



Durham Cathedral Library,

Durham, England.

*The plan for reference libraries so strongly advocated by Dr. Poole (classifying the books in departments, and arranging them for storage and study in separate rooms, under one roof) has so far influenced library construction that modern library plans provide accommodations for readers near the books they want to use, whatever system of shelving is adopted.*

*In a circulating library the books most in use should be shelved in floor-cases close to the delivery desk. In the floor-cases of a reference library the upper shelves should be narrower than those below, with a ledge about*

*Communications by speaking tubes and bells should be arranged between the working rooms of a library.*

So far, prominent librarians who have given special study to library construction, appear to agree unanimously. Other points of general agreement—such, for instance, as objection to lofty halls for use as reading-rooms or delivery-rooms,—have been omitted where anyone could be found who doubted their universal application. On many such points librarians are approaching unanimity through frank discussion and practical experiment.





XCIII.

Font in Siena Cathedral.

# THE BROCHURE SERIES

## OF ARCHITECTURAL ILLUSTRATION.

VOL. III.

DECEMBER, 1897.

No. 12.

### RENAISSANCE HOLY-WATER BASINS.

THE series of holy-water basins here illustrated covers a period of time in sculpture limited only by the limits of the Renaissance. Here are to be seen examples of sculpture of the late 14th century; of the early 15th century when the Gothic was not yet wholly done away with; of the late 15th century when the Renaissance was in the first flush of its success; of the 16th century when the height had been gained and the descent was near; and finally of that period of decadence which followed so closely on the heels of all golden eras of art.

It was to the Florentines Ghiberti and Donatello that it was given to first spread the standard of Renaissance sculpture. Niccola Pisano in the 13th century had tried, it is true, to gather a following under his banner of classic revival at Pisa. His efforts to establish a school were, however, in vain. The rising Gothic influence proved too strong for his successors, and the return to classicism was delayed for a century.

If, however, Gothic sculpture received at the hands of Ghiberti its first blow in Florence, it was not only there that it suffered. In Siena, not many years later, the Renaissance, under the influence of Jacopo della Quercia, made

marked progress. Della Quercia's earliest work, as exemplified by the famous Fonte Gaja in Siena, was thoroughly Gothic in spirit. Then followed the period when graceful motives of classic origin controlled his style, and finally he was possessed by a dramatic quality that was later not without its influence on Michael Angelo.

The Sienese school, founded by della Quercia, was not powerful in the development of the Renaissance. His followers, in spite of their efforts, were incapable of carrying on his work in his spirit, and their sculpture is, for the most part, sadly mannered. Antonio Federighi, who flourished in the latter part of the 15th century, showed, perhaps more than anyone else, ability to appreciate della Quercia's leaning toward the classic. Burckhardt states that Siena owes much of her later decorations to this sculptor. While it is now possible to recognize little of his work, it is known that he designed and executed the "Seven Ages of Man"\* in the pavement of the cathedral of Siena. To Federighi are attributed the two holy-water basins in this cathedral. The one of which two views are given is also attributed by some authorities to della Quercia himself; but there is

\* See BROCHURE SERIES for March, 1897. No. 3, Vol. III.



XCIV.

Font in Siena Cathedral.

nothing in the records of the work of either man that makes the authorship certain. It would, of course, raise the estimate of Federighi's ability if this basin were proved to be by his hand. Whoever may have been the sculptor, however, the work is happily still to be seen and admired.

XCIII., XCIV. AND XCV.  
 FONTS IN SIENA CATHEDRAL.

It would seem that the sculptors who designed these fonts were working to produce an abstractly beautiful object, rather than one best suited for its purpose. There is, therefore, no reason why such forms may not be appropriate in designs for other purposes. The general form and detail will serve not only as a guide in designing other baptismal fonts, but, as can be easily seen, will be valuable as suggestions for many other purposes, such as ornamental lamp standards, fountains, and in other places where an elaborated feature is required to accent a particular portion of an architectural design.

The two basins stand at the entrance to the cathedral with the rich color of the columns for a background. They are similar in treatment and if not by the same hand are surely of the same period. Not only the general design but the details of the sculpture are in the same spirit.

All authorities that give Federighi credit for either of the basins assert that he did both; while those that attribute one basin to della Quercia state that the sculptor of the other is unknown. It seems not impossible that della Quercia designed the first and that Federighi used it as a model. It must be admitted, however, that in style neither is obviously prior to the other.

There are simpler and perhaps more beautiful basins to be found in the churches of Italy, but certainly none more gorgeous than these two. From bowl to base they are richly and elaborately carved with fanciful taste. The bases were at one time supposed to be antique but it is now definitely known that they are of the same period as the basins themselves. The effect of the whole is of great, and perhaps almost of grotesque elaboration.

XCVI.

FONT IN ORVIETO CATHEDRAL.

The holy-water basin in the cathedral of Orvieto is evidently of late date. Possibly it is a copy from the work of the late Renaissance. Certain qualities that suggest Roman spirit of much earlier date show themselves. The ornament is delicate and, for the most part, well arranged. The bowl is hardly spreading enough and the base is somewhat clumsy.

XCVII.

FONT IN CHURCH OF S. BERNARDINO, VERONA.

The holy-water basin in the church of San Bernardino at Verona is chiefly noticeable for its awkward shape. Nothing could be more clumsy than the supporting shaft. The bowl is not spreading enough and looks contracted and weak in spite of its heaviness. Most of the ornament is crude. The effect of elaborateness is no doubt due to the richness of the material, not to any beauty of design.

XCVIII. AND XCIX.

FONTS IN CHURCH OF S. ANTONIO, PADUA.

The two basins from the church of San Antonio at Padua are interesting but not especially beautiful. In both, the bowl and the shaft seem disconnected. No subtle mouldings make easy and graceful the transition from horizontal to perpendicular motive. The carving has little character. It is said that Tizian Aspetti, a scholar of the extravagant Alessandro Vittoria, executed the two surmounting figures, one of Christ and the other of John the Baptist. Aspetti worked in the 17th century when the Renaissance was practically dead, and his work is even more extravagant than that of his master.

C.

FONT IN PISA CATHEDRAL.

The holy-water basin in the cathedral of Pisa is the work of an unknown master of the 15th century. It is full of grace and simple beauty. The delicately fashioned ornament is some of the best of the time. There are more elaborate holy-water basins in Tuscany, but none more noble or more delicate, not only in general contour but in detail.



XCV.

Font in Siena Cathedral.

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### Club Notes.

Most auspiciously did the Cleveland Club open its second annual exhibition on Monday evening, November 15. The Club members and their friends thronged the rooms, and from the latter many were the exclamations of wonder, surprise and admiration at the magnitude, arrangement and quality of the exhibition.

Ten large rooms and the corridor of the tenth floor of the New England Building were occupied; the corridor and the seven large rooms across the entire front of the building being devoted to the exhibition, while in three rooms in the rear an interesting and admirably arranged advertiser's exhibit was shown.

Between seven and eight hundred separate exhibits were hung representing club, school and individual work. The corridor contained the exhibit of post-offices and custom houses recently hung at the Nashville Exposition and kindly loaned by the Treasury Department at Washington.

In the room at the east end of the building was hung the work of the T-Square Club, Cleveland Club and portions of the exhibits by the Universities of Harvard and Pennsylvania. In the next room came the balance of the T-Square Club work and that of Philadelphia men, with the exhibit of the

Philadelphia School of Industrial Art. The third room contained the exhibits by Cornell and Columbia Universities and some Cleveland work. The fourth room and the one opposite the main entrance contained the Memorial Collection illustrating the life and works of Richard Morris Hunt, loaned by Mrs. Hunt and Richard Howland Hunt. In the fifth room the balance of the Cleveland work was shown. The sixth room contained the exhibits from Chicago, St. Paul, Detroit and that of the Detroit Club. The seventh and last room contained the remaining drawings of the Harvard and University of Pennsylvania works, the Atelier Masqueray drawings and the Boston and Columbus exhibits.

Among the work which attracted particular attention was the Hunt work, the French drawings from Cornell, the "Doorway, Santa Paula, Seville" by A. C. Munoz, the measured scholarship drawings by Percy Ash, the work of Messrs. Winslow & Wetherell, J. A. Schweinfurth and Peabody & Stearns, and the proposed entrance to Lincoln Park, Chicago, by Sutcliffe & Buck.

In water-color work the exhibition was particularly rich as shown in the work of Messrs. J. A. Schweinfurth, Ross Turner, Geo. P. Fernald, Boston; Lawrence Buck and Misses Christia M. Reade and Ida J. Burgess of Chicago; Chas. S. Schneider, Geo. W. Andrews, Ora Coltnan, W. Dominick Benes, Louis Rohrheimer, Wilbur M. Hall, Cleveland; A. Kahn, Emil Lorch, Detroit; Elmer Gray, Milwaukee; Frank A. Hays, A. C. Munoz, Daniel E. Sutton, W. T. Supplee, Gustave Ketterer, Philadelphia; and Thomas Holbrooke, St. Paul.

Fine examples of pencil work were shown by Messrs. D. A. Gregg, Boston; John H. Elliott, Chas. S. Schneider, Benj. S. Hubbell, Cleveland; and Miss Christina M. Reade, Chicago.

In pen and ink work, D. A. Gregg, Chas. D. Maginnis, A. Campbell, Boston; Walter Schumm, Miss Reade, Chicago; W. B. Olmstead, Elmira, N.Y.; Boyd & Boyd, Frank A. Hays, Philadelphia; and Chas. S. Schneider, Cleveland, were prominent.



XCVI.

Font in Orvieto Cathedral.

The catalogue issued contains about seventy-five illustrations with one hundred and seventy-eight pages.

From a financial standpoint it was not a great success, but the Club feels well repaid for having given such a noteworthy exhibition from every other point of view.

The members of the Sketch Club of New York held their regular monthly meeting at the rooms, No. 3 East 14th St., on Saturday evening, December 4.

The Club's guests for the evening were Mr. Edward L. Tilton and Mr. Nathaniel Vickers. Mr. Tilton, in the course of a most interesting talk on his "Travels in Greece," illustrated by means of a blackboard the restoration of some of the ancient temples, from the first discovery of a few simple fragments of masonry to the time when a drawing of the finished edifice was possible. Mr. Vickers spoke on "Gothic Detail" with particular reference to vaulting, and showed some specially prepared drawings, showing, to a large scale, sections of a church with stone-vaulted ceiling. With the blackboard Mr. Vickers then demonstrated a new "Theory of Proportion," of which he is the originator, and described his method of designing piers and moldings and the setting out of the ribs and ceiling vault in a most lucid and interesting manner. The only expressed regret was that time did not permit either of these gentlemen to follow out their subjects still further.

Messrs. Hen. Bjorn, Lovel and Crosby did much to make the evening pass pleasantly with their music.

The Club has entered upon its first medal competition for the season: subject, a "Park Fountain."

The "Life," "Water Color" and "Architectural Research" classes are now in progress. There are opportunities for a few more members to join.

A regular meeting of the T-Square Club was held on Wednesday evening, December 1. The subject for competition being: "An Arrangement of Terraces and Steps." Mr. Wilson Eyre, Jr., was the critic for the evening. First mention was awarded to

David K. Boyd, second mention to Wm. C. Hays, and third mention to John Molitor. The award of medal and mentions for the second annual re-designing competition were also announced at this meeting; the drawings having been previously sent to New York, where they were judged by Messrs. John Galen Howard, Bruce Price and Henry Bacon, who had kindly consented to act as a jury for the competition. The awards were as follows: Gold medal to Horace H. Burrell; Second Mention to Samuel R. Davis; Third Mention to Charles Z. Klauder.

The Chicago Architectural Club has, during the past month, been as active as usual.

On the 29th of November Mr. Frank Lloyd Wright met the members in a discussion of the "Arts and Crafts."

In connection with the Illinois Chapter of the A. I. A., the Club has arranged a course of five lectures by Prof. William Henry Goodyear of the Brooklyn Academy. The dates and subjects of the lectures are as follows:—

November 18, "Horizontal Curves and other optical refinements in Greek Architecture." December 2, "Surveys showing structural optical refinements in Italian Churches." December 9, "Pisa Cathedral, further exemplifying and illustrating the above." December 16, "The Egyptian Lotus in Greek decorative art." December 23, "The Roman Ruins of Eastern Syria, showing the Roman decadence and transition to the Byzantine." The friends and clients of the members, and architects who are not members of either organization, are cordially invited to attend these lectures.

On the 6th of December the Club held a "Ladies' Night" at which Mr. and Mrs. Dwight H. Perkins, Mr. and Mrs. Robert C. Spencer, Jr., Mr. and Mrs. Myron H. Hunt, Mr. and Mrs. P. J. Weber, Mr. and Mrs. Howard V. D. Shaw, Mr. Arthur Woltersdorf, Mr. E. Gribble Killen, Mr. Elmer C. Jensen, A. G. Zimmerman and Mr. E. H. Seaman entertained. Dancing, music and an exhibition of class drawings were the features of the evening.



XCVII.

Font in Church of S. Bernardino Verona.

## THE BROCHURE SERIES

COMPETITION "A."

### ANNOUNCEMENT OF THE AWARD.

IN BROCHURE COMPETITION A a very lively interest has been taken. Upwards of fifty designs were received, and this interest has decided the publishers to continue these competitions as a regular feature of the magazine. Arrangements have been made to present at least six problems during the coming year, the first of which has been already announced in the November issue.

In "Competition A" the judges, — Mr. C. Howard Walker, Mr. Bertram Grosvenor Goodhue and the editor, — after a careful consideration of all the designs submitted, have made the following announcement:

The prize has been awarded to Mr. ALEXANDER BLUMBERG, 67 Moffat Block, Detroit, whose drawing surrounds this page. The merits of this design may be seen at a glance. It is interesting and has distinction. The break in the inscription at the top is, however, unfortunate; and the bottom of the design looks a little blank. It is, moreover, too delicate to harmonize with any but light-faced type.

Before making criticisms upon the remaining drawings perhaps one or two words of generalization are necessary. As a whole the drawings, though neat and work-

manlike, show a deplorable lack of originality. Another main fault which ran through the entire series of sketches was that the lettering was, in almost every case, the worst feature of the design, — not only being crude and inharmonious, but showing no recognition of the principle that the lettering should form an integral part of any decorative composition which contains it.

The six designs which are reproduced on the following pages are typical and possess merit; and lack of space only prevents our reproducing others which are equally good. Indeed, the great reduction necessary in order to crowd even these six into the pages of THE BROCHURE has shown them to disadvantage.

The judges consider that it may add interest to this competition if a word or two of criticism be accorded to the most noteworthy designs; although without the designs before the reader's eye for comparison many of the criticisms will lack point. It should be remembered, however, in regard to these criticisms that they are not as harsh as they may on casual reading appear. It is much easier to point out the faults of a design in a few words than to explain its merits. Moreover, to set forth the

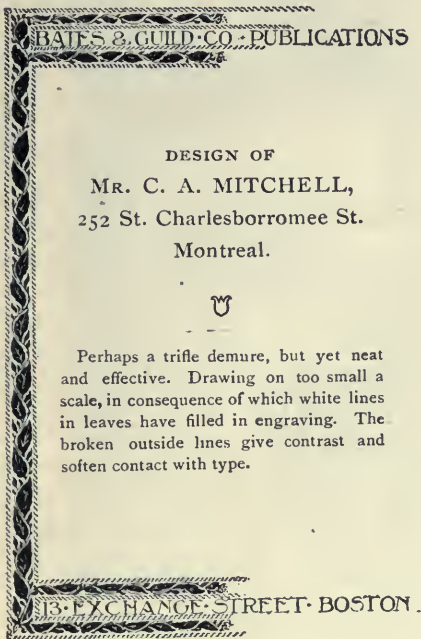


XCVIII.

Font in Church of S. Antonio, Padua.

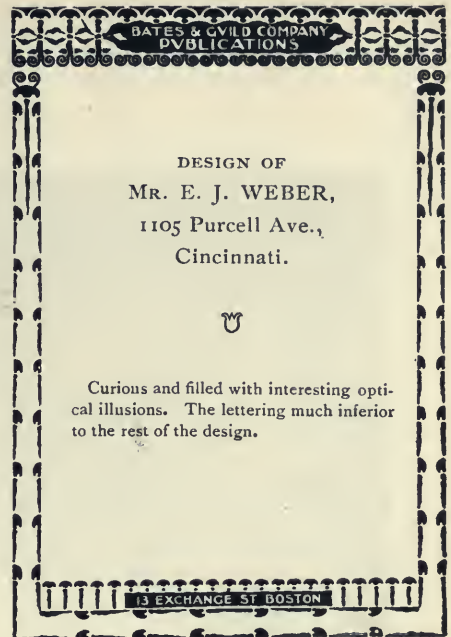
merits of the designs, which in the main are of so uniform a character and deal with the same subject, would necessarily involve monotonous repetition. They have, therefore, contented themselves with pointing out in the briefest possible form the noticeable shortcomings of each design, and will trust the competitors to receive these comments in proper spirit.

50. MR. KNOWLES. The emblems in the corner of this design are hackneyed; the ends of the scroll are bad. The remainder, though attractive, is of the stock Italian pattern. — 53. MR. JOHNSON. The most satisfactory part



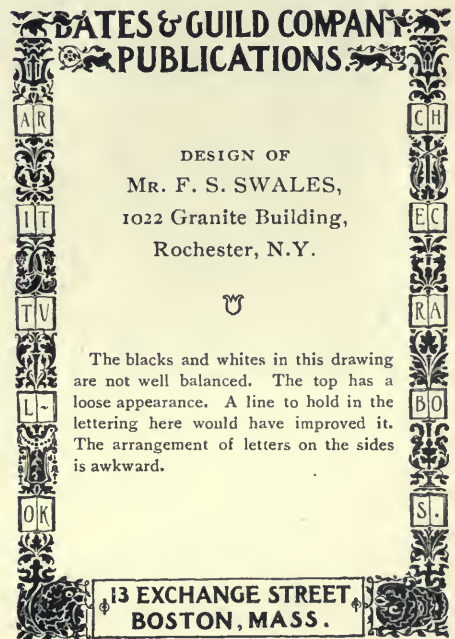
Perhaps a trifle demure, but yet neat and effective. Drawing on too small a scale, in consequence of which white lines in leaves have filled in engraving. The broken outside lines give contrast and soften contact with type.

of this drawing is the upper right hand corner. The lettering is careless and bears no relation to the remainder. — 43. MR. HUNTINGTON. Perhaps too delicate for an advertising page. The lettering not prominent enough. Sides are lacking in strength to correspond with the top and bottom. — 64. MR. LEMKE. Interesting but, shall we say, "weird"? — 56. MR. STROBEL, JR. (two designs.) So regular that they might have been set from type, and consequently lack the interesting quality which should pertain to original designs. — 55. MR. OSTHOFF, JR. Border pattern good. Lettering execrable. — 48.



Curious and filled with interesting optical illusions. The lettering much inferior to the rest of the design.

MR. FLACH. Why old English type in a French baroque design? — 46. MR. THOMPSON. Lettering too light. Design otherwise consistent. — 38. MR. SCHUCHARDT. Lettering best part of the design. — 32. MR. MILLER. Motive commonplace but well executed. — 59.



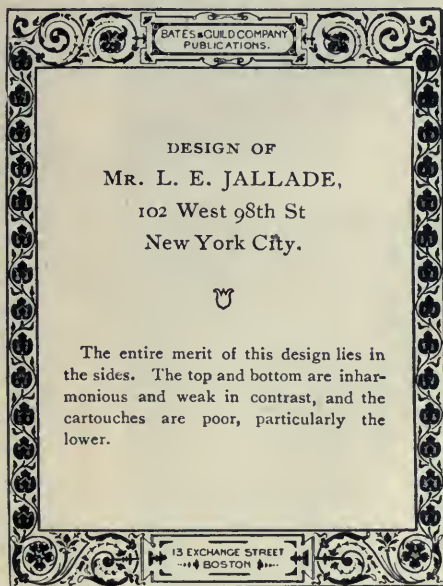
The blacks and whites in this drawing are not well balanced. The top has a loose appearance. A line to hold in the lettering here would have improved it. The arrangement of letters on the sides is awkward.



XCIX.

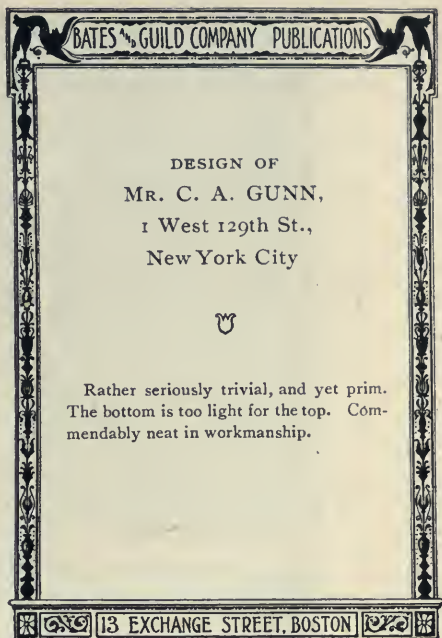
Font in Church of S. Antonio, Padua.

MR. WENGENWROTH. The repeat masculine and effective. — 72. MR. SUTTON. Well distributed: corners poor. — 77. MR. OLMSTED (two designs). A — perhaps not so Greek as the intention; B — Reminiscent of linoleum. — 31. MR. FRENCH. Neat in the workmanship. — 66, 75, 44. MESSRS. SANSBURY, STROUT and FREETHY. These three drawings are what are known in ateliers as "Gothic," — that is, the ornament is cusped. It would be interesting to discover if any mediæval designer would recognize it as Gothic. — 35. MR. PRICE. Neat workmanship. Would it work out if completely drawn?

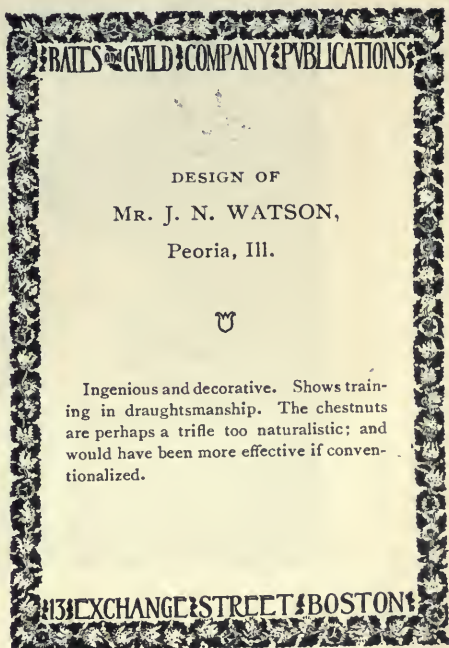


— 60. MR. VINAL. Perhaps the Morris-like motive for this design was suggested from a reproduction in the Dickinson Type Foundry Specimen book. No type foundry book, however, could have suggested the lettering. — 47. MR. ROTH. Lower half much better than the upper half. — 36. MR. DESTREMPES. Might have served for a cover of the "Lady's Annual" half a century ago. — 69. MR. DANA. Design broken by cartouches. — 63. MR. RUSSELL. Has the merit of novelty. Appropriate, perhaps, as an advertisement for chafing-dishes.

It might be well to remark in this connection that some of the best designs were necessarily excluded from the



Competition because of lack of conformity with the stated conditions. One of the most attractive, which would otherwise have been considered for the prize, was thrown out on this account. It has been redrawn, and is used in the advertising pages of the preceding number.





C.

Font in Pisa Cathedral.





P

320429

Technol.

B

Author

Brochure series of architectural illustration, 3, 1897

Title

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DATE.

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